



ASSAM POWER DISTRIBUTION COMPANY LTD.

(A Successor Company of Assam State Electricity Board)

**O/o the Chief General Manager (PP&D),
Bijulee Bhawan, Paltanbazar, Guwahati-1**

Ph: 0361-2735684

Fax: 0361-2739626

E-mail: gmnre.apdcl@gmail.com

Web: www.apdcl.org

E-TENDER DOCUMENT

FOR

**IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR
POWER PLANTS IN RESIDENTIAL SECTORS IN DIFFERENT DISTRICTS
THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL**

UNDER

**Phase – II of Grid Connected Rooftop Solar
Programme, MNRE, GOI**

RfS No: APDCL/CGM (PP&D)/NRE-168/2020-21/116 Date: 17/08/2020

Date: 17/08/2020

DISCLAIMER

1. Though adequate care has been taken while preparing the RfS document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within **seven (7) days from the date of notification of RfS/ Issue of the RfS documents**, it shall be considered that the RfS document is complete in all respects and has been received by the Bidder.
2. Assam Power Distribution Company Limited (APDCL) reserves the right to cancel/ withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision
3. APDCL reserves the right to modify, amend or supplement this document.
4. While this RfS has been prepared in good faith, neither APDCL nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RfS, even if any loss or damage is caused by any act or omission on their part.

Place: Guwahati

Date:

PART - I

INVITATION FOR BIDS (IFB) & BID DETAILS

**INVITATION FOR BIDS (IFB)
FOR
IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR POWER PLANTS IN RESIDENTIAL
SECTORS IN DIFFERENT DISTRICTS OF ASSAM THROUGH CAPEX MODEL UNDER PHASE – II OF GRID
CONNECTED ROOFTOP SOLAR PROGRAMME, MNRE, GOI**

**(SINGLE STAGE TWO ENVELOPE BIDDING)
Under e-procurement**

Date of Issuance of IFB: 18/08/2020

- 1.0 Government of India has launched Jawaharlal Nehru National Solar Mission (JNNSM) which now has a target of 100,000 MW of grid solar power by 2022, out of which grid connected rooftop Solar PV systems is considered as very potent area and has a target of 40,000 MW. To achieve energy security and for having good optics, it is envisaged to develop solar rooftop projects on large scale by **utilizing vacant roofs of buildings and adjoining lands of the campus** etc.
- 2.0 MNRE (Ministry of New & Renewable Energy, Government of India) has sanctioned 2 MW aggregate capacities of Grid Connected Rooftop Solar Power Plants to APDCL on **27/07/2020** for the implementation of said plants in Residential Sector in Assam.
- 3.0 For the purpose of all procurement activities related to the said works, **Assam Power Distribution Company Limited** (hereinafter referred to as '**APDCL**') shall be referred to as '**Employer**'.
- 4.0 APDCL, therefore, invites sealed bids from eligible bidders to participate in Request for Selection (RfS) for Site Survey, Design, Manufacture, Supply, Erection, Testing and Commissioning and Operation & Maintenance of **2 MW** Grid Connected Rooftop Solar Power Plants (GCRSPP) in residential sector in different locations of Assam **against the following categories:**

Sl. No	Category	Total Tender Capacity (kW)	Capacity wise Category	Individual Plant Capacity	Total Capacity against category (kW)
1	Tender Category	1600	Tender Category-I	1 kW	200
			Tender Category-II	2 kW	400
			Tender Category-III	3 kW	400
			Tender Category-IV	>3 to 10 kW	600
2	MSE Category	400	MSE Category-I	1 kW	50
			MSE Category-II	2 kW	100
			MSE Category-III	3 kW	100
			MSE Category-IV	>3 to 10 kW	150
	Total	2000			2000

- 5.0 For the implementation of above mentioned work, Bidders should submit their bid proposal both online and offline complete in all respect on or before Last date of Bid Submission as mentioned on the Bid Information Sheet.
- 6.0 Bidder shall submit bid along with non-refundable **Tender Processing Fee** and refundable Bid Security (EMD) complete in all respect as per the Bid Information Sheet. Techno- Commercial bids will be opened as per the Bid Information Sheet in online & offline mode in presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed bid fees and Bid Security (EMD) will be rejected. **However the bidder must deposit online non refundable tender processing fee and EMD shall also be submitted online while submission of tenders in <https://assamtenders.gov.in>.** In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
- 7.0 Bid documents which include Eligibility Criteria, Technical Specification, various conditions of contract, formats etc. can be downloaded from the official website of APDCL www.apdcl.org or from <https://www.assamtenders.gov.in>. It is mandatory to download official copy of RfS document from <https://www.assamtenders.gov.in> in order to participate in the tender. Any amendment (s) / corrigendum / clarification (s) with respect to this Bid shall be uploaded on <https://www.assamtenders.gov.in> only. The Bidder should regularly check for any Amendment (s) / Corrigendum / Clarification (s) on the above website only

8.0 The bidding process under this RfS is for 2 MWp GCRSPP in CAPEX Model comprising of plant capacity from 1 kW to 10 kW.

9.0 **Vide notification No. 318/331/2017 GCRT, Solar Rooftop Division dated 30/01/2020; all the bidders within the price bracket of (L1 + X% of L1) shall be empanelled where L1 is discovered lowest rate provided they agree to accept L1 rate. The 'X' value under this RFS shall depend on the allotment of capacity to the vendors till tender capacity against each category is exhausted.**

10.0 Bidder can quote

- Maximum of 500 kW under Tender Category & 200 kW under MSE category and
- Minimum of 200 kW under Tender Category & 120 kW under MSE category as per the eligibility criterion of RfS.
- The maximum and minimum aggregate quote capacities against each categories shall be as follows:

Sl. No	Category	Capacity wise Category	Individual Plant Capacity	Maximum Quoted Capacity (kW)	Minimum Quoted Capacity (kW)
1	Tender Category	Tender Category-I	1 kW	63	25
		Tender Category-II	2 kW	125	50
		Tender Category-III	3 kW	125	50
		Tender Category-IV	>3 to 10 kW	187	75
		Tender Category		500	200
2	MSE Category	MSE Category-I	1 kW	25	15
		MSE Category-II	2 kW	50	30
		MSE Category-III	3 kW	50	30
		MSE Category-IV	>3 to 10 kW	75	45
		MSE Category		200	120

11.0 It is mandatory for the bidder to quote all the categories in the same tendering process otherwise all of the proposals in which the Bidder has participated to be disqualified

12.0 The detailed scope of work includes:

- Site Survey, Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection, Testing & Commissioning of the grid connected rooftop Solar PV Project including Operation and Maintenance (O & M) of the project for a period of 5 years after commissioning of project.
- Identification of residential consumer of APDCL and shall be required to visit the respective sites and check the feasibility of space including installation capacity in consultation with respective site in-charge / owner. Successful bidders need to submit project sanction documents (EPC agreement between successful bidder and the rooftop owner(s) at the approved project cost as per RfS and project report) for the approval of APDCL for issuance of project specific sanction letter(s).

13.0 Tender Processing Fee and Bid Security/EMD shall be submitted online and the techno – commercial bid shall be submitted both online & offline in the office of APDCL.

14.0 PBG amount shall be furnished by the successful bidder after issuance of LOA by APDCL.

NB: For further details regarding online payment of tender processing fees and EMD, please visit the link <https://assamtenders.gov.in/nicgep/app.jsessionid=3CE1531EA122696CA1FE6CAEBA50A5D1.asmgeps2?page=WebAnnouncements&service=page#100>

BID INFORMATION SHEET

The Bid Information Sheet is provided below:

Particulars	Description																				
Document Description	Implementation of 2 MW Grid Connected Roof top Solar Power Plants in residential sectors in different districts of Assam through CAPEX model under phase – ii of grid connected rooftop solar programme, MNRE, GOI																				
RFS No. and Date	APDCL/CGM (PP&D)/NRE-168/2020-21/116 Date: 17/08/2020																				
Benchmark Cost	<table><tr><th>Sl. No</th><th>Plant capacity</th><th>Benchmark Cost (Rs./kWp)</th></tr><tr><td>1</td><td>1 kW</td><td>Rs. 52000/-</td></tr><tr><td>2</td><td>2 kW</td><td>Rs. 47000/-</td></tr><tr><td>3</td><td>3 kW</td><td>Rs. 46000/-</td></tr><tr><td>4</td><td>>3 to 10 kW</td><td>Rs. 45000/-</td></tr></table>	Sl. No	Plant capacity	Benchmark Cost (Rs./kWp)	1	1 kW	Rs. 52000/-	2	2 kW	Rs. 47000/-	3	3 kW	Rs. 46000/-	4	>3 to 10 kW	Rs. 45000/-					
Sl. No	Plant capacity	Benchmark Cost (Rs./kWp)																			
1	1 kW	Rs. 52000/-																			
2	2 kW	Rs. 47000/-																			
3	3 kW	Rs. 46000/-																			
4	>3 to 10 kW	Rs. 45000/-																			
Location	<p>Residential: All types of residential buildings</p> <p>The above categories shall exclude Government Buildings and Government Institutions and also all commercial and industrial establishment, which are not eligible for any CFA by MNRE, GoI</p>																				
Total capacity	<table><tr><th>Sl. No</th><th>Category</th><th>Capacity (kW)</th><th>Minimum Quoted Capacity (kW)</th><th>Maximum Quoted Capacity (kW)</th></tr><tr><td>1</td><td>Tender Category</td><td>1600</td><td>200</td><td>500</td></tr><tr><td>3</td><td>MSE Category</td><td>400</td><td>120</td><td>200</td></tr><tr><td></td><td>Total</td><td>2000</td><td></td><td></td></tr></table>	Sl. No	Category	Capacity (kW)	Minimum Quoted Capacity (kW)	Maximum Quoted Capacity (kW)	1	Tender Category	1600	200	500	3	MSE Category	400	120	200		Total	2000		
Sl. No	Category	Capacity (kW)	Minimum Quoted Capacity (kW)	Maximum Quoted Capacity (kW)																	
1	Tender Category	1600	200	500																	
3	MSE Category	400	120	200																	
	Total	2000																			
Downloading of Bidding Document	The Bidding Document can be downloaded online only through www.apdcl.org and https://www.assamtenders.gov.in website of Government of India from 17.08.2020 at 17:00 Hrs to 07.09.2020 upto 12:00 Hrs																				
Period of work	8 (Eight) Months from the date of issuance of LOA																				
Last Date of Submission of Query	24.08.2020 upto 15.00 HRS																				
Pre-bid Conference / Clarification Meeting	25.08.2020 at 12.00 HRS through online mode in Google Meet. All the prospective developers are requested to visit official website of APDCL (www.apdcl.org) or https://assamtenders.gov.in on or before 24.08.2020 for process of joining of the meeting.																				
Last date & Time for Online Submission of bids and physical submission of offline document	07.09.2020 upto 15.00 HRS																				
Address for submission of Techno-Commercial Bid	General Manager (NRE) Assam Power Distribution Company Limited, Bijulee Bhawan , Annex Building, O/o the CGM (RE) Paltanbazar, Guwahati. Dist.: Kamrup (Metro), Pin: 781001, Assam, India. Telephone No.:- (0361) - 2735684 E-mail: gmnre.apdcl@gmail.com																				
Online Bid Opening (Techno-Commercial)	09.09.2020 at 14.00 HRS																				
Price Bid Opening	To be intimated subsequent to techno – commercially responsive bidders																				
Cost of RFS (Non-refundable applicable for the Bidder)	<p>Amount: INR 5000/- (Indian Rupees Five Thousand Only) to be submitted by the Bidder in online while online submission of tenders in https://assamtenders.gov.in.</p> <p>Micro and Small Enterprise (MSEs) having registered with District Industries & Commerce Center, Assam who are also registered in NSIC under their single point registration scheme shall be exempted from furnishing the Tender Fee, subject to the submission of documentary evidence as mentioned in clause no. 3.13 of this RfS.</p>																				

Bid Security (EMD) applicable for the Bidder	<p>(1) Tender Category: Amount: INR 520/- per kW (Indian Rupees Five Hundred & Twenty only) or part thereof as per quoted capacity</p> <p>The EMD to be submitted by the Bidder in online while online submission of tenders in https://assamtenders.gov.in.</p> <p>(2) Local MSE(s): Micro and Small Enterprise (MSEs) having registered with District Industries & Commerce Center, Assam who are also registered in NSIC under their single point registration scheme shall be exempted from furnishing the EMD, subject to the submission of documentary evidence as mentioned in clause no. 3.13 of this RfS</p>
Performance Security / Contract Performance Guarantee (CPG) to be submitted by successful bidders	Amount: INR 1300/- per kW (Indian Rupees One Thousand Three Hundred per kW only) or part thereof as awarded by APDCL in favor of “ Chief General Manager (PP&D) “APDCL, payable at Guwahati.
Consortium	Allowed
Local MSE	Allowed
Details of persons to be contacted in case of any assistance required	<ol style="list-style-type: none"> 1. Sri Pradip Goswami DGM (NRE), APDCL M. No: 8638380374 (Office hour only) 2. Sri Jyotiska Barua AGM (NRE), APDCL M. No: 9678965437 (Office hour only) 2. Sri Jitu Moni Das Consultant (NRE), APDCL M. No: 8135078531(Office hour only)

Important note:

1. Prospective Bidders are requested to remain updated for any or all notices, amendments, corrigendum, clarifications etc. to the Bidding Document published through the websites <https://www.assamtenders.gov.in>. No separate notifications shall be issued for such notices, amendments, corrigendum, clarifications etc. in the print media or individually to the prospective Bidders and in no case APDCL shall be held responsible for any loss of information to the Bidders.
2. Intimation regarding notification on the above shall be updated and the details shall be only available from <https://www.assamtenders.gov.in>.

-S/d-

Chief General Manager (PP&D)
APDCL, Bijulee Bhawan (Annex Building),
Paltanbazar, Guwahati-1

Memo No.: APDCL/CGM (PP&D)/NRE-168/2020-21/116

Date: 17/08/2020

Copy to:-

1. **P.S to the Managing Director**, APDCL, Bijulee Bhawan, Paltanbazar, Guwahati-1, for kind appraisal of the Managing Director.
2. **Sri Aujender Singh**, Deputy Secretary to the Govt. of India, **Ministry of New & Renewable Energy, GOI**, Block No 14, CGO Complex, Lodi Road, New Delhi 110003 for kind information
3. **Sri H.C. Borah, Scientist –C, Ministry of New & Renewable Energy, GOI**, Block No 14, CGO Complex, Lodi Road, New Delhi 110003 for kind information
4. **The OSD to the Chairman**, APDCL, along with a Soft Copy of the Bid Document for uploading in the official website
5. Office Notice Board.

-S/d-

Chief General Manager (PP&D)
APDCL, Bijulee Bhawan (Annex Building),
Paltanbazar, Guwahati-1

----- End of (IFB) -----

PART - II

INSTRUCTIONS TO BIDDERS (ITB)

DEFINITION

In this RFS, unless the context otherwise requires, capitalized terms shall have the meaning given to them in the table below:

Affiliate	<p>“ Affiliate” shall mean a company that either directly or indirectly</p> <ol style="list-style-type: none"> controls or is controlled by or is under common control with <p>Bidding Company and “control” means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company</p>
APDCL	Means Assam Power Distribution Company Limited
AERC	Means Assam Electricity Regulatory Commission
BIS	Mean specifications of Bureau of Indian Standards (BIS).
BID	Mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFS, in accordance with the terms and conditions hereof
Bidder/Bidding Company	Mean Bidding Company submitting the Bid. Any reference to the Bidder includes Bidding Company / including its successors, executors and permitted assigns as the context may require
Bid Deadline	Mean the last date and time for submission of Biding response to this RFS as specified in Bid information Sheet
Bid Capacity	Means capacity to be quoted by the bidder in his Bid under invitation
CEA	Mean Central Electricity Authority
Chartered Accountant	Mean a person practicing in India or affirm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949
Commissioning	Means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in RFS
Company	Mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto.
Capacity Utilization Factor” (CUF)	Means the ratio of the annual output of the plant in kWh versus installed plant capacity for number of days. $CUF = \text{plant output in kWh} / (\text{installed plant capacity in kWp (DC side)} * 365 \times 24)$.
IEC	Mean specifications of International Electro-Technical Commission
kWp	Mean Kilo-Watt Peak under STC
Model(s)	Mean CAPEX
O&M	Mean Operation &Comprehensive Maintenance of Rooftop Solar PV system.
Project Cost / Project Price	Shall mean the price offered by the Bidder for the Scope of work as per RFS document
Parent Company	Mean a company that holds at least fifty one percent (51%) of the paid-up equity capital directly or indirectly in the Bidding Company as the case may be
Qualified Bidder	Mean the Bidder(s) who, after evaluation of their Techno Commercial Bid stand qualified for opening and evaluation of their Price Bid.
RFS	Mean Request for Selection (RFS)/Bid document/Tender document.
Sector	Means Residential, Social & Institutional buildings
Successful Bidder(s) /Contractor/Project Developers(s)	Mean the Bidder(s) selected by APDCL pursuant to this RFS, for Implementation of 2 MWp Grid Connected Roof Top Solar PV System as per the terms of the RFS Documents, and to whom Letter of Award has been issued
Tendered Capacity	Mean the Total aggregate capacity in 2 MWp as indicated RFS, proposed to be allocated by APDCL to the Successful Bidder(s) through this bidding process as per terms and conditions specified therein
Ultimate Parent Company	Mean a company which directly or indirectly owns at least fifty one percent (51%) paid up equity capital in the Bidding Company) and/or in the Financially Evaluated Entity and such Bidding Company and /or the Financially Evaluated Entity shall be under the direct control or indirectly under the common control of such company

SECTION I:
A. INTRODUCTION, BID DETAILS AND INSTRUCTIONS TO THE BIDDERS

1.0 INTRODUCTION

- 1.1.** Ministry of New and Renewable Energy (MNRE), GOI has accorded sanction to Assam Power Distribution Company Limited (APDCL) for installation of cumulative capacity of 2 MWp grid connected rooftop solar power plants in Assam for residential sector. The generated solar power will be fed to the grid, on EXIM (Export-Import) metering basis. The scheme aims to reduce the fossil fuel based electricity load on main grid and make building self-sustainable from the point of electricity, to the extent possible.
- 1.2.** In furtherance of the objective of MNRE to promote On-grid Solar Rooftop, APDCL invites for Request for Selection (RFS) for Selection of Power Producer for Implementation of 2 MWp of Grid Connected Rooftop Solar PV Power Plants under CAPEX Model for residential sector at various locations in the State of Assam in accordance with operational guidelines issued by MNRE vide OM No. 318/331/2017 – Grid Connected Rooftop dated 20.08.2019

Table 1
Central Financial Assistance (CFA) shall be available for the following categories

	Type of residential sector	CFA
(i)	Residential sector (maximum up to 3 kW capacity)	40 % of benchmark cost or cost discovered through competitive process whichever is lower
(ii)	Residential sector (above 3 kW capacity and up to 10 kW capacity)	40 % up to 3 KW Plus 20% for RTS system above 3 kW and up to 10 kW of benchmark cost or cost discovered through competitive process whichever is lower

1.3. The subsidy/CFA structure applicable is tabulated as below:

Individual Plant Capacity (kW)	Breakup of Plant Capacity eligible for CFA (kW)		MNRE Benchmark Cost for FY 2020-21(Rs./Wp)	Discover ed Rate (Rs./Wp)	Eligible CFA		
	Plant Capacity for eligible CFA@40% (kW)	Plant Capacity for eligible CFA@20% (kW)			CFA @40%	CFA @20%	Total CFA (Rs./Wp)
(i)	(ii)	(iii) = (i)-(ii)	(iv)	(v)	(vi)	(vii)	(viii) (vi)+(vii)
1	1	0	52	L1	(40%*52*1) or (40%*L1*1) whichever is less	NA	(vi)+(vii)
2	2	0	47	L1	(40%*47*2) or (40%*L1*2) whichever is less	NA	(vi)+(vii)
3	3	0	46	L1	(40%*46*3) or (40%*L1*3) whichever is less	NA	(vi)+(vii)
4	3	1	45	L1	(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*1) or (20%*L1*1) whichever is less	(vi)+(vii)
5	3	2	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*2) or (20%*L1*2) whichever is less	(vi)+(vii)
6	3	3	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*3) or (20%*L1*3) whichever is less	(vi)+(vii)
7	3	4	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*4) or (20%*L1*4) whichever is less	(vi)+(vii)
8	3	5	45		(40%*45*3) or (40%*L1*3)	(20%*45*5) or (20%*L1*5)	(vi)+(vii)

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

					whichever is less	whichever is less	
9	3	6	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*6) or (20%*L1*6) whichever is less	(vi)+(vii)
10	3	7	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*7) or (20%*L1*7) whichever is less	(vi)+(vii)

- 1.4. The Bidder is advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the bid document must be furnished. Failure to provide the information and / or documents as required may render the bid technically unacceptable
- 1.5. The bidder shall be deemed to have examined the bid document, to have obtained his own information in all matters whatsoever that might affect the carrying out of the works in line with the scope of work specified elsewhere in the document at the offered rates and to have satisfied himself to the sufficiency of his bid. The bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labor involved, wage structures and as to what all works he has to complete in accordance with the bid documents irrespective of any defects, omissions or errors that may be found in the bid documents

2.0 BID DETAILS

- 2.1. The bidding process under this RfS is 2 MWp for residential sector in CAPEX Model. The category wise tender capacity is as follows:

Sl. No	Category	Total Tender Capacity (kW)	Capacity wise Category	Individual Plant Capacity	Total Capacity against category (kW)
1	Tender Category	1600	Tender Category-I	1 kW	200
			Tender Category-II	2 kW	400
			Tender Category-III	3 kW	400
			Tender Category-IV	>3 to 10 kW	600
2	MSE Category	400	MSE Category-I	1 kW	50
			MSE Category-II	2 kW	100
			MSE Category-III	3 kW	100
			MSE Category-IV	>3 to 10 kW	150
	Total	2000			2000

- The bidder shall quote the bid capacity within the set limit of capacities against each category.
- 2.2. Based on the Price quoted by the bidder, APDCL shall empanel the vendors in the ascending order i.e. L1, L2, L3, _ _ _ (L1 being the lowest quoted bidder) as per operational guidelines issued vide OM No. 318/331/2017 GCRT, Solar Rooftop Division dated 30/01/2020. All bidders within the price bracket of (L1 + X% of L1) shall be empanelled till the total tender capacity is exhausted, provided they agree to accept L1 rate. The value of 'X' under this RFS shall depend on the allotment of capacity to the vendors till tender capacity is exhausted.
- 2.3. The benchmark cost as notified by MNRE for the financial year 2020-21 are as follows:

Sl. No	Individual Plant Capacity	Benchmark Cost (Rs./kWp)
1	1 kW	52000
2	2 kW	47000
3	3 kW	46000
4	>3 kW to 10 kW	45000

Any bidder quoting above the benchmark cost or 5% below the benchmark cost shall be considered as non-responsive and the EMD shall be returned without forfeiture. Further it is clarify that

Quoted price ≤ benchmark cost or

Quoted price = (-) 5% of benchmark cost shall be considered as responsive.

For example:

Sl. No	Individual Plant Capacity	Benchmark Cost (Rs./kWp) (X)	Quoted Price (Rs./kWp)	Responsive / Non Responsive
1	1 kW	52000	X	Responsive
2	2 kW	47000	X-X*5%	Responsive
3	3 kW	46000	X-X*5.01%	Non Responsive
4	>3 kW to 10 kW	45000	X + X*0.01%	Non Responsive

2.4. SIZE OF THE PROJECTS

The size of each project shall be in the range from 1 kWp to 10 kWp.

2.5. BID CAPACITY

▪ Bidder can quote

- ❖ Maximum of 500 kW under Tender Category & 200 kW under MSE category and
- ❖ Minimum of 200 kW under Tender Category & 120 kW under MSE category as per the eligibility criterion of RfS.
- ❖ The maximum and minimum aggregate quote capacities against each categories shall be as follows:

Sl. No	Category	Capacity wise Category	Individual Plant Capacity	Maximum Quoted Capacity (kW)	Minimum Quoted Capacity (kW)
1	Tender Category	Tender Category-I	1 kW	63	25
		Tender Category-II	2 kW	125	50
		Tender Category-III	3 kW	125	50
		Tender Category-IV	>3 to 10 kW	187	75
		Tender Category		500	200
2	MSE Category	MSE Category-I	1 kW	25	15
		MSE Category-II	2 kW	50	30
		MSE Category-III	3 kW	50	30
		MSE Category-IV	>3 to 10 kW	75	45
		MSE Category		200	120

- Bidders quoted cumulative capacity less than the minimum tendered capacity against each category shall be out rightly rejected. The bidder shall quote the bid capacity within the set limit of capacities against each category.
- Bids quoting more than maximum allowed bid capacity, APDCL at its own discretion may restrict its capacity upto the maximum allowed bid capacity. APDCL shall not entertain any request from bidder, in this regard
- It is mandatory for the bidder to quote all the categories in the same tendering process otherwise all of the proposals in which the Bidder has participated to be disqualified
- In exceptional circumstances and at the sole discretion of APDCL, unutilized capacity after initial allocation can be allocated within the empanelled vendors based on their financial criteria.
- The Bidders participating under **Tender Category** shall not be allowed to participate under MSE Category, either individually or as a Consortium Partner
- APDCL reserves the right to allocate part capacity also to the bidder on the basis of outcome of the bidding
- APDCL reserves the Right to increase/decrease the quantity of individual plant capacity as well as transfer from one category to another category as per requirement of the project.
- In case no bidder participated under MSE category or any leftover capacity after allotment within the MSE category, then the capacity shall be transferred to the tender category.

3.0 INSTRUCTIONS TO THE BIDDERS

- 3.1. Bidder must meet the eligibility criteria independently as Bidding Company. Bidder will be declared as a Qualified Bidder based on meeting the eligibility criteria and as demonstrated based on documentary evidence submitted by the Bidder in the Bid.

In case of a Bidding Consortium, the Financial Eligibility criteria like Net worth as indicated in the RfS shall be fulfilled by the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium member. In case bidder is a consortium, a Consortium Agreement as per the format prescribed in this RfS shall be furnished along with the bid.

- i. Bidding Consortium with a maximum of two (2) members shall be allowed in this RFS.
- ii. Financial Consortium is not allowed in this Bidding Process. Consortium is only permitted for Technical Partnership. **Financial Eligibility criteria like Net worth as indicated in the RfS shall be fulfilled by the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium member**
- iii. **All members of the consortium should be registered as a Company/ Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC).**
- iv. A Bidder and all partners constituting the Bidder shall submit only one tender in the same tendering process, either individually as a Bidder or as a partner of a Consortium. A Bidder who submits or participates in, more than one tender will cause all of the proposals in which the Bidder has participated to be disqualified. No Bidder can be a subcontractor while submitting a tender individually or as a partner of a Consortium in the same tendering process.

NB: If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be out rightly rejected or debarred or blacklisted from APDCL's future tenders.

3.2. ELIGIBILITY CRITERIA

3.2.1 GENERAL ELIGIBILITY CRITERIA

- (a) **The Bidder should be either a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto. In case, Bidder is a Consortium, all members of the Consortium should be registered individually in India under Companies Act, 1956 or 2013 including any amendment thereto. It shall be noted that the Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm can also participate in this Bidding process.**

A copy of certificate of incorporation/ registration shall be furnished along with the bid in support of above.

- i. A Bidder may be from any country, either a single entity or any combination of entities. In the case of a Consortium: all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; and the Consortium shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the Consortium during the tendering process and, in the event the Consortium is awarded the Contract, during contract execution.
- ii. A Bidder and all partners constituting the Bidder can be from any country and any areas. A non-Indian firm is permitted to tender only in a consortium arrangement with any other Indian firm having minimum participation interest of 26% or their wholly owned Indian subsidiary registered in India under Companies Act-1956 or 2013 with minimum 26% participation.
- iii. APDCL/ Any Central / State government department or public sector undertaking/ other government entity or local body **must not have banned business with the Bidder (including individual members in case of Consortium) as on the date of Bid submission.**
- iv. Also no work of the Bidder must have been rescinded/ terminated by APDCL/ any central or State Govt. Department/ Public Sector Undertaking/ Other Govt. entity or

local body after award of contract during last 3 years (from the last day of the previous month of tender submission) due to non-performance of the Bid. The Bidder should submit undertaking to this effect as per the format prescribed in this RfS. **If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be out rightly rejected or debarred or blacklisted from APDCL's future tenders.**

- v. If the Bidder or any member of consortium failed to execute less than 50% of any work (On Grid Solar /Off Grid Solar projects) allotted by APDCL due to any other reason during FY 2018-19 or FY 2019-20 within the project completion lime line, then the bidder or members of consortium shall not be eligible to participate.
- vi. Bidder (any member in case of consortium) must not have suffered bankruptcy/ insolvency during the last 5 years. The Bidder should submit undertaking to this effect as per the format prescribed in this RfS.
- vii. The bidder should have valid GST registration certificate.
(Copy to be furnished in support)

Note: The Bidders participating under **Tender Category** shall not be allowed to participate under MSE Category, either individually or as a Consortium Partner.

GENERAL ELIGIBILITY CRITERIA FOR CONSORTIUM:

The Bidder can also participate as Bidding Consortium with **one of the members acting as the Lead Member of the Bidding Consortium**. In case bidder is a consortium, a Consortium Agreement as per the format prescribed in this NIT shall be furnished along with the bid.

- i. Bidding Consortium with a maximum of two (2) members shall be allowed in this bid.
- ii. **All members of the consortium should be registered as a Company/ Partnership firms/ Sole Proprietorship Firm / Limited Liability Partnership (LLP)/ Limited Liability Company (LLC).** A copy of certificate of incorporation/registration shall be furnished along with the bid in support the same.
- iii. GST Registration Certificate & PAN of all the members of the consortium shall be furnished along with the bid
- iv. Consortium shall NOT be allowed for the bidder participated as a MSE bidder
- v. Financial Eligibility criteria like Net worth as indicated in the RfS shall be fulfilled by the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium member

MSE Category (Reserved for Local MSE having registered office in the State of Assam):

The Bidders participating under **MSE Category (Reserve Local MSE Category)**, shall not be allowed to participate under Tender Category, either individually or as a Consortium Partner. **Further, Consortium shall NOT be allowed for the bidder participated as a MSE bidder.**

3.2.2 TECHNICAL ELIGIBILITY CRITERIA

The Bidder should have designed, supplied, installed & commissioned

- a) At least one Grid connected Solar PV Project other than Grid Connected Rooftop Solar Power Plant **having a capacity of not less than 250 kWp** during last 3 years

OR

- b) **50 kW** aggregate capacities of **Grid Connected Roof top Solar PV Projects** during last 3 years. The list of projects commissioned indicating whether the project is grid connected, along with a copy of the Commissioning certificate and Work order /Contract / Agreement/ from the Client/Owner shall be submitted.

Note:

- a. **The work order & work completion report in support of technical eligibility criteria furnished by any private organization shall not be considered for evaluation.**
- b. Government Organization means any entity which is either directly controlled by the Central or State Government or is under the administrative control of Central or State Government or a Central Public Sector Enterprise (CPSE)/ Central Public Sector Undertaking (CPSU)/State PSU etc.
- c. Subcontractor experience shall not be considered for evaluation

3.2.3 FINANCIAL ELIGIBILITY CRITERIA

The Bidder should have Net worth as indicated below:

NET-WORTH

- **Net-Worth of Bidder during last audited financial year i.e., FY 2019-20 should be greater than or equal Rs. 10000 per kW. "Net Worth" of the Bidder shall be calculated as per Company Act 2013.**
- The Net-Worth value in the prescribed format shall be certified by Chartered Accountant with his stamp and signature in original and same shall be submitted along with the bids.

3.3. INCORPORATION OF A PROJECT COMPANY

- 3.3.1 In case the Bidder wishes to incorporate a Project Company, in such a case Bidder if selected as a Successful Bidder shall incorporate a Project Company. Bidder shall be responsible to get all clearances required/obtained in the name of the Bidding Company transferred in the name of the Project Company
- 3.3.2 The aggregate equity share holding of the Successful Bidder (Individual or in case of Consortium) minimum in proportion to their percentage participation in the issued and paid up equity share capital of the Project Company shall not be less **than fifty one percent (51%) up to a period of Five (5) years** from the date of commissioning of the entire Capacity of the Project Developer. The Successful Bidder may invest in the equity share capital of the Project Company through its Affiliate(s) or Parent Company or Ultimate Parent Company. If the Successful Bidder so invests, the Successful Bidder shall be liable to ensure that minimum equity holding/Lock in limits specified above are still maintained.

3.4. BID SUBMISSION BY THE BIDDER

- 3.4.1 The information and/or documents shall be submitted by the Bidder as per the formats specified in the bid document
- 3.4.2 Strict adherence to the formats wherever specified, is required. Wherever, information has been sought in specified formats, the Bidder shall refrain from referring to brochures /pamphlets. Non-adherence to formats and / or submission of incomplete information may be a ground for declaring the Bid as non-responsive. Each format has to be duly signed and stamped by the authorized signatory of the Bidder
- 3.4.3 The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clause no. 3.2.1, 3.2.2 and 3.2.3 to fulfill the compliance of the bidding document.

3.5. BID SUBMITTED BY A BIDDING COMPANY

- 3.5.1 The Bidder shall submit a duly **notarized written Power of Attorney (POA)** authorizing the signatory (ies) of the Tender to commit the Bidder of each member of the partnership, consortium along with **copy of Board Resolution/authorization in favor of signatory to POA**. In case of Foreign Partners, Power of Attorney(s) and Board Resolution confirming authority on the persons issuing the Power of Attorney for such actions shall be submitted duly notarized by the notary public of country of origin and should be either stamped by Embassy/High Commission or Member Countries of Hague convention may submit all these

documents with “Apostille” stamp. Also in case the documents are in foreign language the translation of the same shall be authenticated by Embassy/High Commission.

- 3.5.2 Each Bidder (each member in the case of consortium) is required to confirm and declare with his Tender that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this Contract and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not include any such amount. To fulfill this requirement, the Bidder (each member in case of Consortium) has to sign the declaration given as prescribed in this RfS. If the Employer subsequently finds to the contrary, the Employer reserves the right to declare the Bidder as non-compliant, and declare any Contract if already awarded to the Bidder to be null and void.

3.6. CLARIFICATIONS AND PRE-BID MEETING

- 3.6.1 APDCL will not enter into any correspondence with the Bidders, except to furnish clarifications on RfS Documents, if necessary. The Bidders may seek clarifications or suggest amendments to RfS online, also soft copy by e-mail to reach APDCL at the address, date and time mentioned in Bid information sheet.
- 3.6.2 The Bidder(s) or their authorized representative(s) is /are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid information sheet, or any such other date as notified by APDCL .
- 3.6.3 The purpose of the pre-bid meeting will be to clarify any issues regarding the RfS including in particular, issues raised in writing and submitted by the Bidders.
- 3.6.4 APDCL is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought by the bidder
- 3.6.5 A prospective Bidder requiring any clarification of the Bid Documents may contact General Manager (NRE), APDCL in writing or by E- mailing address gmnre.apdcl@gmail.com

3.7. AMENDMENTS TO RFS BY APDCL

- 3.7.1 At any time prior to the deadline for submission of Bids, APDCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RfS document by issuing clarification(s) and/or amendment(s).
- 3.7.2 The clarification(s) / amendment(s) (if any) shall be notified on <https://www.assamtenders.gov.in> at least Two (2) days before the proposed date of submission of the Bid. If any amendment is required to be notified within Two (2) days of the proposed date of submission of the Bid, the Bid Deadline may be extended for a suitable period of time.
- 3.7.3 APDCL will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the website for any such amendment before submitting their Bid.
- 3.7.4 In case any amendment is notified after submission of the Bid (prior to the opening of Techno- Commercial Bid) due date /time shall be extended and it will be for the Bidders to submit fresh Bids/supplementary bids as the date notified by the APDCL for the purpose.
- 3.7.5 All the notices related to this Bid which are required to be publicized shall be uploaded on <https://www.assamtenders.gov.in>.

3.8. BIDDING PROCESS

3.8.1 OFFLINE BID FOR SUBMISSION OF HARDCOPIES

The Bid in response to this RfS shall be submitted by the Bidder in the manner provided in the RfS. The Bid shall comprise of the following in the Techno – Commercial Bid:

A. ENVELOPE- I:

- i. Covering Letter as per prescribed **Format-1**

- ii. Copy of Bid Submission Confirmation regarding Online Submission of Tender Processing Fee & EMD generated from e-Procurement System Government of Assam (Assam Tenders)

B. ENVELOPE- II: TECHNO-COMMERCIAL DOCUMENTS

- I. General Information about the Bidder as per prescribed **Format –A**. Following needs to be submitted by the bidder (or **by each member in case of Consortium**)
 - Certificate of Incorporation for Public/Private Limited company/Limited Liability Partnership / Limited Liability Company.
 - Registration Certificate / Partnership Deed in case of Sole Proprietorship / Partnership firms
 - Memorandum & Article of Association in case of Public / Private Limited Company
 - GST Registration Certificate & PAN

- II. General particulars of bidders as per **Format-2**

- III. **Power of attorney** issued by the Bidding Company in favor of the authorized person signing the Bid, in the form attached hereto as **Format-5** or standard power of attorney in favor of authorized person signing the Bid.

(Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act-2013). However, Employer may accept general Power of Attorney executed in favor of Authorized signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.

In case of Indian firm, the power of Attorney shall be on Non Judicial stamp paper of suitable value, duly notarized. In case of foreign applicant the power of Attorney shall be notarized in their country, and attested by the Embassy/High Commission of their country in India

- IV. Details for meeting Financial Eligibility Criteria as per Clause no. 3.2.3 in the prescribed **Format-6 & Format 9** along with documentary evidence for the same
- V. Details for meeting technical eligibility criteria as per Clause no. 3.2.2 in the prescribed **Format-7** along with documentary evidence for the same
- VI. **Format 10** Consortium agreement (In case of bidder participated as a Consortium)
- VII. All required format like **Format -11, Format -12, Format -13, Format -14 & Format -15**
- VIII. Details of the proposed items as per prescribed format 'FORMAT-16' along with following supporting documents:

- ❖ **Test** report/certificate of Solar PV Module from IEC/NABL accredited laboratory as per relevant IEC standard (IEC 61215 edition II / IS 14286 and IEC 61730 Part 1- requirements for construction & Part 2 – requirements for testing, for safety qualification)
- ❖ Enclose test reports/ certificate of **proposed PCU** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 62116 (Anti-islanding protection)
 - IEC 62109-1, IEC 62109-2 (Safety compliance)
 - IEC 60068-2 (1, 2, 14, 30) (Environmental Testing)
 - IS/IEC 61683 (Efficiency Measurement Procedure)
- ❖ Enclose test reports/ certificate of **proposed Cable** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 60227/ IS 694, IEC 60502 / IS 554 Std

- ❖ Enclose test reports/ certificate of **proposed Junction Box** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IP 65 and IEC 62208
- ❖ Enclose test reports/ certificate of **proposed ACDB** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 60947, Part I, II and III/ IS 60947 Part I, II and III

IX. Signed and stamped Copy of RFS Documents including amendments & clarifications by Authorized signatory on each page

Please note that, the price bid should not be submitted in the techno-commercial bid. If the price bid is submitted as a part of technical bid submission, all the quoted bids will be rejected.

3.8.2 ONLINE BID FOR SUBMISSION OF TECHNO-COMMERCIAL BID AND PRICE BID

A. TECHNO- COMMERCIAL BIDS

The Techno-Commercial Bid shall contain the scanned copy of the documents & online submission of tender processing fee & EMD set out below, in a sequential manner:

- i. Covering Letter as per prescribed **Format-1**
 - ii. Non- Refundable Tender Processing fee to be submitted online while online submission of tender in <https://assamtenders.gov.in>
 - iii. Bid Security/EMD, to be submitted online while online submission of tender in <https://assamtenders.gov.in>
 - iv. General Information about the Bidder as per prescribed **Format –A**
 - Certificate of Incorporation for Public/Private Limited company/Limited Liability Partnership / Limited Liability Company.
 - Registration Certificate / Partnership Deed in case of Sole Proprietorship / Partnership firms
 - Memorandum & Article of Association in case of Public / Private Limited Company
 - GST Registration Certificate & PAN
- V. **Power of attorney** issued by the Bidding Company in favor of the authorized person signing the Bid, in the form attached hereto as **Format-5** or standard power of attorney in favor of authorized person signing the Bid.
- (Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act-2013).** However, Employer may accept general Power of Attorney executed in favor of Authorized signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.
- In case of Indian firm, the power of Attorney shall be on Non Judicial stamp paper of suitable value, duly notarized. In case of foreign applicant the power of Attorney shall be notarized in their country, and attested by the Embassy/High Commission of their country in India
- VI. Details for meeting Financial Eligibility Criteria as per Clause no. 3.2.3 in the prescribed **Format-6 & Format 9** along with documentary evidence for the same

- VII. Details for meeting technical eligibility criteria as per Clause no. 3.2.2 in the prescribed **Format-7** along with documentary evidence for the same
- VIII. **Format 10** Consortium agreement (In case of bidder participated as a Consortium)
- IX. All required format like **Format -11, Format -12, Format -13, Format -14 & Format -15**
- X. Details of the proposed items as per prescribed format '**FORMAT-16**' along with following supporting documents:
- ❖ **Test** report/certificate of Solar PV Module from IEC/NABL accredited laboratory as per relevant IEC standard (IEC 61215 edition II / IS 14286 and IEC 61730 Part 1- requirements for construction & Part 2 – requirements for testing, for safety qualification)
 - ❖ Enclose test reports/ certificate of **proposed PCU** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 62116 (Anti-islanding protection)
 - IEC 62109-1, IEC 62109-2 (Safety compliance)
 - IEC 60068-2 (1, 2, 14, 30) (Environmental Testing)
 - IS/IEC 61683 (Efficiency Measurement Procedure)
 - ❖ Enclose test reports/ certificate of **proposed Cable** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 60227/ IS 694, IEC 60502 / IS 554 Std
 - ❖ Enclose test reports/ certificate of **proposed Junction Box** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IP 65 and IEC 62208
 - ❖ Enclose test reports/ certificate of **proposed ACDB** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 60947, Part I, II and III/ IS 60947 Part I, II and III
- XI. Signed and stamped Copy of RFS Documents including amendments & clarifications by Authorized signatory on each page

NB: For further details regarding online payment of tender processing fees and EMD, please visit the link
<https://assamtenders.gov.in/nicgep/app;jsessionid=3CE1531EA122696CA1FE6CAEBA50A5D1.asmgps2?page=WebAnnouncements&service=page#100>

B. PRICE BIDS

Financial Bid shall be submitted only through online mode with due encryption. The Bidder shall submit its Financial Bid for the cumulative eligible capacity as per Technical Capacity and Financial Capacity, online only in the format uploaded in the <https://www.assamtenders.gov.in> portal of GOI.

Please note that, the price bid should not be uploaded in the technical bid submission. If the price bid is submitted as a part of technical bid submission, all the quoted bids will be rejected.

3.9. TENDER DUE DATE

The Bidder should submit the Bids so as to reach the address indicated below at the date and time mentioned in the Bid Information Sheet.

General Manager (NRE)
Assam Power Distribution Company Limited,
Bijulee Bhawan (Annex. Building), Paltanbazar, Guwahati-01
Dist.: Kamrup (Metro), Pin: 781001, Assam, India.
Telephone No.:- (0361) - 2735684
E-mail: gmnre.apdcl@gmail.com

3.10. VALIDITY OF TENDER

- 3.10.1 The Tender shall be valid for a period of 90 days from the latest Date of Submission of Tenders, with bidder having no right to withdraw, revoke or cancel his offer or unilaterally vary the offer submitted or any terms thereof. In case of the bidder revoking or cancelling his offer or varying any term & conditions in regard thereof or not accepting letter of award, APDCL shall forfeit the EMD furnished by him. **Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter.**
- 3.10.2 In exceptional circumstances when letter of award (LOA) is not issued, APDCL may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner

3.11. COST OF BIDDING

The bidder shall bear all the costs associated with the preparation and submission of his offer, and APDCL will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with his submission of bid even though APDCL may elect to modify / withdraw the invitation of Bid.

3.12. BID SECURITY /EMD

The Bidder shall furnish the Interest free EMD of **520/- per kW** (Indian Rupees Five Hundred Twenty per Kilowatt only) or part thereof for quoted capacity and shall be submitted online while online submission of tender in <https://assamtenders.gov.in>.

NB: For further details regarding online payment of tender processing fees and EMD, please visit the link <https://assamtenders.gov.in/nicgep/app;jsessionid=3CE1531EA122696CA1FE6CAEBA50A5D1.asmgeps2?page=WebAnnouncements&service=page#100>

The formula applicable to calculate the EMD amount will be:

EMD amount = (INR 520) X Bid Capacity in kWp

In case of Micro and Small Enterprise (MSEs):

Micro and Small Enterprise (MSEs) having registered with District Industries & Commerce Center, Assam who are also registered in NSIC under their single point registration scheme shall be exempted from furnishing the Earnest Money Deposit (EMD)/Bid Bond subject to the submission of following documentary evidence.

1. Notarized copy of valid Entrepreneurs memorandum (EM Part -II) issued by District Industries & Commerce Center, Assam or Udyog Adhar Memorandum (UAM) for the Goods/Services in support of the RfS Documents
2. Notarized copy of Valid NSIC Certificate
3. Notarized copy of valid Registration Certificate issued by General Manager, DI & CC under Procurement Preference Policy, Assam, 2015 & Procurement Preference (Amendment) Policy, Assam, 2017
4. Notarized copy of valid documentary evidence which states that **“the head office or corporate office of such registered unit is within the territorial jurisdiction of Assam.**
5. Notarized copy of valid documentary evidence which states that **“The manufacturing or Service unit is located within the State of Assam.**

- The Bid Bond/EMD of bidders who fail in technical evaluation shall be returned after opening of financial package.
- The Bid Bond/EMD of the unsuccessful bidders in financial opening shall be released after unconditional acceptance of the Letter of Acceptance (LOA) by the successful bidders.
- The Bid bond of successful bidder shall be returned after award of work and submission of Performance BG and after the receipt of confirmation of their PBG's from their respective banker.

In case of a consortium, the EMD / Bid Bond is to be submitted in the name of the Lead Member of consortium.

No clarification shall be sought from the bidders regarding bid security

The Bid Bond/EMD shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to APDCL:

- a. If a Bidder withdraws/revokes or cancels or unilaterally varies his bid in any manner during the period of Bid Validity specified in the RFS document.
- b. If the Successful Bidder fails to unconditionally accept the Allocation letter within 15 days from the date of its issue.
- c. If the Successful Bidder fails to furnish the "Performance Bank Guarantee (PBG)".

3.13. PERFORMANCE SECURITY/PERFORMANCE BANK GUARANTEE (PBG)

3.13.1 Within 15 days from the date of issue of Letter of Award (LOA), Successful Bidder shall furnish the Performance Security/PBG amounting to Rs. **1300/- per MWp** (Indian Rupees One Thousand Three Hundred per kW only) or part thereof for capacity awarded by APDCL. The PBG shall furnish in the form of Bank Guarantee (BG) in favor of "**Chief General Manager (PP&D), APDCL "payable at Guwahati.**

3.13.2 The Performance Security shall be valid for **a minimum period of 5 years from the date of issuance of Allocation Letter(s)** and shall be renewed / extended till the completion of 5 years of O&M period. The Performance security shall be released after 5 years from the date of commissioning with the compliance of entire obligations in the contract.

NB: In case the successful bidder is not able to furnish the PBG for 5 year of validity, then PBG with initial validity period of 1 year may also be accepted by APDCL provided the successful bidder shall renew/extend the PBG, 30 days prior the expiry of the same. If the successful bidder does not extend the PBG, the same shall be forfeited by APDCL.

3.13.3 The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to APDCL

- a) If the Successful Bidder is not able to identify the projects and submit Project Sanction Documents to the satisfaction of APDCL, PBG amount, pro-rata to the capacity for which the Successful Bidder is not able to identify the Projects and submit Project Sanction Documents.
- b) If the Successful Bidder is not able to commission the projects to the satisfaction of APDCL, PBG amount, pro-rata to the capacity not commissioned by the Successful Bidder.

3.14. OPENING OF BIDS

3.14.1 Technical bid (Envelope I and Envelope II) of the Bidder shall be opened at the date and time mentioned in at the venue indicated in Bid Information Sheet of this RFS, in the presence of one representative from each of the Bidder who wish to be present

3.14.2 The bid documents shall be opened by the TEC (Tender Evaluation Committee) on due date and time of tender opening. On opening of the Tender, APDCL will first check the tender processing fee and EMD submitted by the bidders.

- 3.14.3 The Financial Bids will be opened on a subsequent date after evaluation of techno-commercial bids. Financial bids of only those bidders whose submissions are found substantially responsive and technically compliant will be opened. The time of opening of financial bids shall be informed separately to only the Bidders who have qualified during Technical evaluation stage and bidders can be present to witness opening of financial bids.

3.15. RIGHT TO WITHDRAW THE RFS AND TO REJECT ANY BID

- 3.15.1 This RFS may be withdrawn or cancelled by APDCL at any time without assigning any reasons thereof. APDCL further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account
- 3.15.2 APDCL reserve the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the RFS and make its own judgment regarding the interpretation of the same. In this regard APDCL shall have no liability towards any Bidder and no Bidder shall have any recourse to APDCL with respect to the selection process. APDCL shall evaluate the Bids using the evaluation process specified in this RfS, at its sole discretion. APDCL decision in this regard shall be final and binding on the Bidders
- 3.15.3 APDCL reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance or rejection of bid by APDCL will be full and final

3.16. ZERO DEVIATION

This is a ZERO Deviation Bidding Process. Bidder is to ensure compliance of all provisions of the Bid Document and submit their Bid accordingly. Tenders with any deviation to the bid conditions shall be liable for rejection

3.17. EXAMINATION OF BID DOCUMENT

- 3.17.1 The Bidder is required to carefully examine the Technical Specification, terms and Conditions of Contract, and other details relating to supplies as given in the Bid Document
- 3.17.2 The Bidder shall be deemed to have examined the bid document including the agreement/contract, to have obtained information on all matters whatsoever that might affect to execute the project activity and to have satisfied himself as to the adequacy of his bid. The bidder shall be deemed to have known the scope, nature and magnitude of the supplies and the requirements of material and labor involved etc. and as to all supplies he has to complete in accordance with the Bid document
- 3.17.3 Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder's standard terms and conditions if any will not be considered.
- 3.17.4 Bid not submitted as per the instructions to bidders is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this bid document

PART - III

EVALUATION CRITERIA & SUBSIDY DISBURSEMENT

EVALUATION, AWARD CRITERIA, COMPLETION OF PROJECT & SUBSIDY DISBURSEMENT

4.0 BID EVALUATION

4.1 The evaluation process comprises the following four steps

Step I	Responsiveness check of Techno Commercial Bid
Step II	Evaluation of Bidder's fulfillment of Eligibility Criteria
Step III	Evaluation of Price Bid
Step IV	Successful Bidders(s) selection

4.2 STEP – I: RESPONSIVENESS CHECK OF TECHNO COMMERCIAL BID

The Techno Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in the RFS subject to Clause 3.2.1, Clause 3.2.2, and Clause 3.2.3. Any of the following may cause the bid to be considered “**Non-responsive**”, at the sole discretion of APDCL

- i. Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution, applicable undertakings, format for disclosure, valid Bid Bond, etc;
- ii. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFS;
- iii. Material inconsistencies in the information /documents submitted by the Bidder, affecting the Eligibility Criteria
- iv. Information not submitted in the formats specified in this RFS;
- v. Bid being conditional in nature;
- vi. Bid not received by the Bid Deadline;
- vii. Bid having Conflict of Interest;
- viii. Bidder delaying in submission of additional information or clarifications sought by APDCL as applicable;
- ix. Bidder makes any misrepresentation

Each Bid shall be checked for compliance with the submission requirements set forth in this RFS before the evaluation of Bidder's fulfillment of Eligibility Criteria is taken up. In case of any non-conformity, the tender shall be disqualified and rejected

4.3 STEP – II: EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA

EVALUATION OF ELIGIBILITY:

- a. Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in Clause 3.2. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria may cause the Bid to be nonresponsive
- b. Tenders not considered substantially responsive and not full-filling the requirements of the tender document as evaluated as per item clause 4.1 shall be rejected by APDCL and shall not be allowed subsequently to be made responsive by correction or withdrawal of the nonconforming deviation or reservation
- c. If any tender is rejected, pursuant to paragraph (b) above, the Financial Bid of such bidder shall not be opened
- d. The decision of APDCL as to which of the tenders are not substantially responsive shall be final.

4.4 STEP – III: EVALUATION OF PRICE BID

- a. All techno - commercially responsive bidders will be eligible for opening of their financial proposals. APDCL shall notify all technically qualified Bidders to attend the opening of the financial proposal. The financial proposal will then be opened in front of attending Bidders.
- b. Evaluation of financial offer will be based on rates quoted in prescribed format of Price Bid. Any alteration in Price Bid will not be given any cognizance. The rates are inclusive of all applicable taxes, duties, installation & Commissioning, CMC for 5 years, transportation & insurance etc.
- c. Any bidder quoting above the benchmark cost or 5% below the benchmark cost shall be considered as non-responsive and the EMD shall be returned without forfeiture. Further it is clarify that:

Quoted price \leq benchmark cost or

Quoted price = (-) 5% of benchmark cost shall be considered as responsive

4.5 STEP –IV: SUCCESSFUL BIDDER(S) SELECTION

- a. **In case of Tender Category:**

Based on the Price quoted by the bidder, APDCL shall empanel the bidders in the ascending order i.e. L1, L2, L3, _ _ _ (L1 being the lowest quoted bidder) as per operational guidelines issued by MNRE vide OM No. 318/331/2017 GCRT, Solar Rooftop Division dated 30/01/2020. All bidders within the price bracket of (L1 + X% of L1) shall be empanelled till the total tender capacity is exhausted, provided they agree to accept L1 rate. The value of 'X' under this RFS shall depend on the allotment of capacity to the vendors till tender capacity is exhausted

- b. **In case of MSE category:**

In case, a non-MSE bidder holds L1 rate and one or more MSE bidder (s) quote in the range of (L1+L1x20%), then APDCL shall arrange the bids amongst the MSE bidder (s) in the ascending order M1, M2, M3, _ _ _ (M1 being the lowest MSE quoted bidder)

For Example;

Non MSEs have quoted the rates are:

- x. Rs. 100.00 (L1)
- y. Rs. 102.00
- z. Rs. 105.00

Eligible MSE quoted rates in the bidding process are:

- a. Rs. 120.00
- b. Rs. 117.00
- c. Rs. 115.00 (Lowest)

Price Range : L1 + 20% of L1 = Rs. 100 + Rs.20 = Rs. 120.00

The ascending order amongst the MSE bidders are c, b, a (i.e., M1, M2, M3)

5.0 NOTIFICATION TO SUCCESSFUL BIDDERS

- 6.1 Prior to the expiry of the period of tender validity prescribed by APDCL, APDCL will notify the successful Bidder by telegram or Tele-fax, to be confirmed in writing by registered letter, that his tender has been accepted (hereinafter and in the Conditions of Contract called 'the Letter of Award'). The "Letter of Award" will be issued under signature of CGM (PP&D), APDCL. The "Letter of Award" will be sent in duplicate to the successful Bidder, who will return one copy to APDCL duly acknowledged and signed by the authorized signatory, within one week of receipt of the same by him. No correspondence will be entertained by APDCL in the unsuccessful Bidders.

6.0 ALLOCATION OF CAPACITY

6.1 The total capacity reserve for tender category & MSE category is as follows:

Sl. No	Category	Capacity (kW)
1	Tender Category	1600
3	MSE Category	400
	Total	2000

6.2 Capacity wise tender capacity & maximum & minimum quoted capacity against the Tender category & MSE Category is as follows:

Sl. No	Category	Total Tender Capacity (kW)	Capacity wise Category	Individual Plant Capacity	Total Capacity against category (kW)	Maximum Quoted Capacity (kW)	Minimum Quoted Capacity (kW)
1	Tender Category	1600	Tender Category-I	1 kW	200	63	25
			Tender Category-II	2 kW	400	125	50
			Tender Category-III	3 kW	400	125	50
			Tender Category-IV	>3 to 10 kW	600	187	75
			Total		1600	500	200
2	MSE Category	400	MSE Category-I	1 kW	50	25	15
			MSE Category-II	2 kW	100	50	30
			MSE Category-III	3 kW	100	50	30
			MSE Category-IV	>3 to 10 kW	150	75	45
			Total			200	120

6.3 Category wise, Ranking of the bidders shall be done in the ascending order L1, L2, L3, _ _ _ (L1 being the lowest quoted bidder) based on their Quoted Price against each category.

6.4 In case of tie in quoted price in one or more category, then the ranking of the bidder shall be done based on their Net-worth value and preference will be given to that bidder who has higher net-worth value.

6.5 The lowest quoted bidder (L1) will be allotted its qualified project capacity. After allotting the quoted capacity to L1 bidder, the balance project capacity shall be allotted in the following manner till the total capacity against each category is exhausted:

Step -1: L2 bidder will be allotted its qualified project capacity at L1 rate subject to its acceptance of the offer & agree to execute the work at L1 rate

Step-2: L3 bidder will be allotted its qualified project capacity at L1 rate subject to its acceptance of the offer & agree to execute the work at L1 rate. The process of allotment will continue to the L4, L5 bidder till the tendered capacity against each category is exhausted.

6.6 After allotment of the bid capacity to the bidder as per ascending order of ranking; if there is any leftover capacity which may be less than quoted capacity of the next eligible higher bidder, then the leftover capacity shall be awarded to the bidder at L1 rate till the tendered capacity against each category is exhausted.

6.7 At the end of selection process, a letter of award (LOA) will be issued to all successful bidders.

6.8 All the qualified Bidders except the L1 Bidder will be given 7 days from the date of identification of L1 rate to give their consent to execute the work at L1 rate, failing which it will be assumed that they are not interested to execute the work at L1 rate. The qualified Bidders who will agree to accept the L1 rate within the specified timelines shall be considered as 'Empanelled Vendors. Thereafter, APDCL shall arrange the list of 'Empanelled Vendors' in ascending order for Tender Category (General Category), and MSE Category.

6.9 APDCL will review the performance of the selected bidder(s) including L1 bidder(s), to whom Allocation Letter has been issued. If found unsatisfactory, APDCL at its sole discretion may withdraw the work from

such non-performing bidder and allocate the capacity to other performing bidders in orderly manner. APDCL reserves right to forfeit security deposit & PBG of such non-performing bidder as applicable.

7.0 PROJECT ALLOCATION & SANCTION:

- 7.1 The identification of the residential consumers / beneficiary at the time of bidding is not mandatory.
- 7.2 The Successful Bidders selected as described in Clause 4.0 & 6.0 above shall be issued **Letter of Allocation (LOA)** indicating the allocated capacity & Project Cost etc.
- 7.3 The bidders, who have been notified as Successful Bidders, shall be given **08 months** from the date of issuance of Letter of Allocation for execution of the capacity. The time for submission of **project sanction documents** by the bidder to APDCL will be maximum **02 (two) months** from the date of issuance of allocation letter which can be extended depending upon the merit of the case. Failure of non-compliance of conditions stipulated above shall lead to forfeiture of PBG in proportion to the capacity allocated.
- 7.4 If after 08 months, the successful bidder could not execute the rooftop(s) capacity up to the allocated capacity, in such case PBG for unexecuted allocated capacity shall be forfeited and the allocated capacity gets cancelled and bidder including its Affiliates / Group Companies / Parent / Ultimate Parent Company may be debarred to participate in APDCL's future tenders for a period as decided by the competent authority of APDCL
- 7.5 After submission of Project Sanction Documents by the Successful Bidder/ Project Developer/empanelled vendor and accepted by APDCL, APDCL will issue the **Sanction Letter(s)** for the Project (s) indicating the Subsidy amount (s) which will be disbursed in line with the provisions of the RfS document. The Bidder shall complete the site survey, design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of each project within 08 months from the date of issue of letter of allocation.

8.0 LIQUIDATED DAMAGES (LD) FOR DELAY IN PROJECT IMPLEMENTATION

- 8.1 APDCL will issue the Letter of Award (LOA) for the Project (s). The Bidder shall complete the survey, design, engineering, supply, storage, civil work, erection, testing & commissioning of each project **within 8 months from the date of issue of LOA**.

If the bidder fails to commission the full awarded project within specified time, Liquidated Damages (LD) @1% of the contract value per week or part thereof subject to the maximum of 10% of the contract value shall be deducted from the bill of the contractor. Beyond 10%, the project will get cancelled and the total PBG amount would be forfeited.

- 8.2 The Contractor may apply for an extension of the Time for Completion if the Work is or will be delayed either before or after the Time for Completion by any of the following causes:
- a. "Force Majeure"
 - b. The Contractor's work held up for not being given possession of or access to the Site for a considerable period.
 - c. Instruction of the Engineer to suspend the Works and the Contractor not being in default as to reasons of suspension.
 - d. Acts or omissions of other Designated Contractors in executing work not forming part of this Contract and on whose performance, the performance of the Contractor necessarily depends.

9.0 TIME OF COMPLETION PROJECT

- 10.1 APDCL will issue the LOA for the Project(s). The Bidder shall complete the survey, design, engineering, supply, storage, civil work, erection, testing & commissioning of awarded project(s) **within 8 months from the date of issue of LOA**. In case of delay beyond scheduled commissioning period, the bidder shall be liable for Liquidated Damages (LD) as per Clause 8.1.

10.0 INSPECTION AND AUDIT BY APDCL

The Successful bidder shall permit APDCL or their authorized agency to inspect the Successful bidder's site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by APDCL, if so required by APDCL any time.

11.0 SCOPE OF WORK

11.1 The Scope of work for the bidder include Identification of APDCL's residential consumers (or beneficiary), Obtaining No Objection Certificate (NOC)" from APDCL for grid connectivity, entering into appropriate contract with the identified consumer (or beneficiary), complete design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of the grid connected rooftop solar PV project including operation and maintenance (O&M) of the project for a period of 5 years after commissioning of the projects as per APDCL's acceptance

11.2 The detailed work would involve (include but not limited to) following major activities:

11.2.1 Bidder shall identify buildings and obtain necessary approvals from APDCL on behalf of the beneficiary for installation of Solar Rooftop System

11.2.2 Bidder will conduct awareness activities in the State through various means including door to door campaign, putting canopies, camps, distributing pamphlets, etc. for attracting the identified consumer categories to offer their roofs for setting up the grid connected solar rooftop systems under CAPEX mode

11.2.3 Bidder shall submit following **project sanction documents** to GM (NRE), APDCL as below to get go ahead for the project:

- List of interested residential consumers of APDCL along with site survey report against each location as per attached format prescribed in this RFS to GM (NRE), APDCL for approval (**Annexure –I**).
- Consent Letter from the Consumer willing to install RTS Power Plant within his premises and ready to deposit requisite amount (beneficiary contribution) as notified by APDCL (**Annexure – II**)
- Apply to www.rodalee.com on behalf of consumer & submit the copy of online submitted application form generated from www.rodalee.com. **The consumer shall be selected on first cum fist serve based on application received on www.rodalee.com.**
- Copy of Technical Feasibility report against each consumer generated from www.rodalee.com.
- GTP & PERT Chart against each project location.
- Copy of EPC agreement executed between consumer & empanelled vendor for installation & commissioning and CMC of the Plant.
- Copy of EXIM Meter payment receipt as issued by field official of APDCL regarding submitted requisite meter cost to the CEO of concerned electrical circle APDCL.
- **Final approval for the installation of the RTS plant to the consumer premises shall be issued by GM (NRE), APDCL after getting requisite beneficiary contribution from the consumer.**

11.2.5 Bidder shall prepare route profile drawing along with electrical connection to consumer(s)

11.2.6 Bill of material shall include PV plant, inverter, distribution boards (AC and DC), cable, combiner box and associated work including protection and monitoring arrangements etc

11.2.7 The Bidder has to take all permits, approvals and licenses, insurance etc., provide training and such other items & services required to complete the scope of work mentioned above.

- 11.2.8 EXIM Metering: Metering and grid connectivity of the roof top solar PV Power Plant under this scheme would be in accordance with the prevailing guidelines of APDCL and/or Central Electricity Authority (CEA)/ Assam Electricity Regulatory Commission (AERC). The cost of EXIM-meter shall be borne by the beneficiary. However, facilitation for the same i.e. submission of application in concerned APDCL's office, follow-up & liaison etc. shall be in the scope of Bidder.
- 11.2.9 Bidder shall provide Technical Manual, User Manual and Operation and Maintenance (O&M) Manual of the plant to the beneficiary in English and Assamese
- 11.2.10 Bidder shall provide training (General/ Technical/ Safety) to the beneficiary's nominated persons for daily operation, cleaning, monitoring and maintenance of power plant. Bidder shall provide maintenance schedule of the plant to beneficiary
- 11.2.11 Any other works though not specifically mentioned but are required to finish the project in all respects for its safe, reliable, efficient and trouble free operation shall also be included and the same shall be supplied and installed by the bidder without any extra cost
- 11.2.12 **Clean up:** Upon completion of the Work, the contractor shall remove from the vicinity of the work all residues, building rubbish, unused materials, concrete forms and other like materials belonging to him or under his direction during construction to the satisfaction of beneficiary and in the event of his failure to do so within 15 days from the date of commissioning. The cost on account of clean up shall be included in the quoted rate and no additional extra claim shall be entertained
- 11.3 Scope of Comprehensive O&M Activities (Quarterly): The Comprehensive quarterly O&M schedule shall include (but not limited to) the following mentioned activities:

Solar Modules:

- (i) Visual inspection of modules and mounting clamps
- (ii) Washing and cleaning of modules and structures
- (iii) Check modules for any broken glass/ discolouration, misaligned modules

Module mounting structure:

- (i) Visual inspection of mounting structures, screws and fasteners
- (ii) Tightening of screws and fasteners as needed.

Junction Box:

- (i) Checking and tightening of solar inter connections
- (ii) Visual inspection of junction boxes and wiring
- (iii) Tightening of any interconnections as needed

Inverters:

- (i) General Cleaning
- (ii) Check LCD displays of inverters
- (iii) Check integrity of wiring
- (iv) Visual inspection of mechanical fixings of inverters

Cables:

- (i) Visual inspection of DC and AC cables
- (ii) Replacement of cables if damaged.

Remote Monitoring (For projects above 1 kWp capacity):

- (i) SCADA daily production data recorded
- (ii) Physical verification of RS485 communication cables between equipment and server.

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

- (iii) Ensure communication between weather station, (Temperature sensor, Wind speed, solar radiation), Inverter output, String monitoring if supplied.
(iv) Internet connectivity, configuration (Remote connectivity HW) Check the data reports like graphs.

12.0 SUBSIDY DISBURSEMENT:

The tentative quantum of subsidy shall be computed as follows:

Individual Plant Capacity (kW)	Breakup of Plant Capacity eligible for CFA (kW)		MNRE Benchmark Cost for FY 2020-21(Rs./Wp)	Discover ed Rate (Rs./Wp)	Eligible CFA from MNRE, GOI		
	Plant Capacity for eligible CFA@40% (kW)	Plant Capacity for eligible CFA@20% (kW)			CFA @40%	CFA @20%	Total CFA (Rs./Wp)
(i)	(ii)	(iii) = (i)-(ii)	(iv)	(v)	(vi)	(vii)	(viii) (vi)+(vii)
1	1	0	52	L1	(40%*52*1) or (40%*L1*1) whichever is less	NA	(vi)+(vii)
2	2	0	47		(40%*47*2) or (40%*L1*2) whichever is less	NA	(vi)+(vii)
3	3	0	46		(40%*46*3) or (40%*L1*3) whichever is less	NA	(vi)+(vii)
4	3	1	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*1) or (20%*L1*1) whichever is less	(vi)+(vii)
5	3	2	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*2) or (20%*L1*2) whichever is less	(vi)+(vii)
6	3	3	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*3) or (20%*L1*3) whichever is less	(vi)+(vii)
7	3	4	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*4) or (20%*L1*4) whichever is less	(vi)+(vii)
8	3	5	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*5) or (20%*L1*5) whichever is less	(vi)+(vii)
9	3	6	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*6) or (20%*L1*6) whichever is less	(vi)+(vii)
10	3	7	45		(40%*45*3) or (40%*L1*3) whichever is less	(20%*45*7) or (20%*L1*7) whichever is less	(vi)+(vii)

NB: The CFA for residential sector as stated above shall be permissible only if domestic manufactured Solar Panels (using domestic manufactured Solar cells) are used by the Beneficiary. The RfS mandates use of both solar photovoltaic (SPV) Cells and modules manufactured domestically as per specifications and testing requirements fixed by MNRE. For the Projects to be implemented under this RfS, both the solar cells and modules used in the Solar Power Projects must be made in India. In case of crystalline Silicon technology, all process steps and quality control measures involved in the manufacture of the Solar Cells and Modules starting from wafers till final assembly of the Solar Cells into Modules shall be performed at the works of PV manufacturers in India.

12.1 **SUBSIDY DISBURSEMENT SCHEDULE:**

The Tentative schedule of disbursement of subsidy shall be as follows:

Sl. No	Milestone	Percentage Subsidy to be Released (% of CFA)
1	Supply & Installation including Synchronization & Commissioning of the Plant of the Plant and accepted by APDCL	70%
2	Completion of first year of successful Maintenance by the bidder	6%
3	Completion of second year of successful Maintenance by the bidder	6%
4	Completion of third year of successful Maintenance by the bidder	6%
5	Completion of fourth year of successful Maintenance by the bidder	6%
6	Completion of fifth year of successful Maintenance by the bidder	6%

12.1.1 Above mode of subsidy disbursement is subject to release of fund by MNRE.

12.1.2 No subsidy shall be applicable for the projects completed after sanctioned period, which is presently 08 months from the date of issue of LOA. Further, APDCL also reserves right to extend sanction period on case to case basis at its sole discretion as per requirement of the project and subject to the approval of MNRE.

12.1.3 Remaining cost of the project will be borne by the beneficiary i.e. **Project Cost minus CFA from MNRE**

12.1.4 The successful bidder must ensure that this subsidy is only for new projects i.e. for projects where dispatch of material and related work has been started only after sanctioning of projects by APDCL. Any roofs on which projects have been installed before the issue of Allocation Letter/ Sanction Letter shall be construed as fraudulent activity in which case the bidder may be debarred from participating in APDCL's future tender for a period as decided by the competent authority. However, such locations may be used for installation of additional capacity with the prior approval of APDCL.

12.1.5 **The CFA for residential sector as stated above shall be permissible only if domestic manufactured Solar Panels (using domestic manufactured Solar cells) are used by the Beneficiary. The RfS mandates use of both solar photovoltaic (SPV) Cells and modules manufactured domestically as per specifications and testing requirements fixed by MNRE. For the Projects to be implemented under this RfS, both the solar cells and modules used in the Solar Power Projects must be made in India. In case of crystalline Silicon technology, all process steps and quality control measures involved in the manufacture of the Solar Cells and Modules starting from wafers till final assembly of the Solar Cells into Modules shall be performed at the works of PV manufacturers in India**

PART - IV

GENERAL CONDITIONS OF CONTRACT (GCC)

13.1. INSURANCE

- 13.1.1 The Bidder shall be responsible and take an Insurance Policy for transit-cum storage- cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.
- 13.1.2 The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract including O&M period covering structural damages & fire hazard. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

13.2. WARRANTIES AND GUARANTEES

The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials.

The bidder shall provide warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning.

The successful bidder has to transfer all the Guarantees/ Warrantees of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and APDCL will not be responsible in any way for any claims whatsoever on account of the above

13.3. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

- 13.3.1 The design, engineering, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Section- III (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used
- 13.3.2 The specifications of the components should meet the technical specifications mentioned in Section III
- 13.3.3 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant

13.4. METERING AND GRID CONNECTIVITY

EXIM metering and grid connectivity of the roof top solar PV system under this RFS would be the responsibility of the Bidder in accordance with the prevailing guidelines of the APDCL and/or CEA / Assam Solar Energy Policy, 2017/AERC. APDCL could facilitate connectivity; however the entire responsibility lies with bidder only

13.5. PLANT PERFORMANCE EVALUATION

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown **minimum of 75% at** the time of inspection for initial commissioning acceptance. **Minimum CUF of 13.5%** should be maintained for a period of 5 years for fulfilling one of the conditions for release of PBG. The bidder should send the periodic plant output details to APDCL for ensuring the CUF. The PR will be measured at Inverter output level during peak radiation conditions.

13.6. PROGRESS REPORT

The bidder shall submit the progress report fortnightly (15 days) to APDCL in Prescribed Performa. APDCL will have the right to depute his/their representatives to ascertain the progress of contract at the premises of works of the bidder

13.7. PROJECT INSPECTION

The project progress will be monitored by APDCL and the projects will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from APDCL or any authorized agency/ experts.

APDCL may depute a technical person(s) for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufacturers' facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

13.8. SUBMISSION OF PROJECT COMPLETION REPORT (PCR)

The bidder shall submit the Project Completion Report (both in editable soft copy and signed hard copy) after commissioning of the project as per the Scope of RFS to APDCL as per the Format prescribed by APDCL. The soft copy of Project Completion Report (PCR) shall also be uploaded in www.rodalee.com. Non-submission of the report shall be considered as "Breach of Contract" and shall attract punitive actions as per the relevant provisions of the Contract including non-release of Subsidy. However, the decision of CGM (PP&D), APDCL shall be final in this regard.

13.9. APPLICABLE LAW

The Contract shall be interpreted in accordance with the laws of the Union of India.

13.10.SETTLEMENT OF DISPUTE

- 13.10.1 If any dispute of any kind whatsoever arises between APDCL and Successful bidder in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.
- 13.10.2 If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given. Any dispute in respect of which a notice of intention to commence arbitration has been given in accordance with RFS, shall be finally settled by arbitration.
- 13.10.3 Any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below:
- APDCL and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the later of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator.
 - If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
 - Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue of arbitration shall be Guwahati.

- The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- The arbitrator(s) shall give reasoned award
- Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree
- Cost of arbitration shall be equally shared between the Successful bidder or Contractor and APDCL

13.11.FORCE MAJEURE

13.11.1 Notwithstanding the provisions of clauses contained in this RFS document; APDCL shall not forfeit (a) Security deposit for delay and (b) termination of contract; if Contractor is unable to fulfill his obligation under this contract due to force majeure conditions

13.11.2 For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, terrorist attacks, quarantine restrictions and fright embargoes etc.

Whether a "Force majeure" situation exists or not, shall be decided by APDCL and its decision shall be final and binding on the contractor and all other concerned

13.11.3 In the event that the contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond two months, APDCL has the right to terminate the contract in which case, the security deposit shall be refunded to him

13.11.4 If a force majeure situation arises, the contractor shall notify APDCL in writing promptly, not later than 7 days from the date such situation arises. The contractor shall notify APDCL not later than 3 days of cessation of force majeure conditions. After examining the cases, APDCL shall decide and grant suitable additional time for the completion of the work, if required.

As per the relevant law, in event of a disagreement between parties on existence of force majeure event arbitration shall decide.

13.12.LANGUAGE

All documents, drawings, instructions, design data, calculations, operation maintenance and safety manuals, reports, labels and any other data shall be in English Language. The contract agreement and all correspondence between APDCL and the bidder shall be in English language

13.13.OTHER CONDITIONS

- i) The Successful bidder shall not transfer, assign or sublet the work under this contract or any substantial part thereof to any other party without the prior consent of APDCL in writing
- ii) The Successful bidder or its subcontractors shall not display the photographs of the work and not take advantage through publicity of the work without written permission of APDCL
- iii) The Successful bidder or its subcontractors shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract
- iv) APDCL will not be bound by any Power of Attorney granted/ issued by the Successful bidder or its subcontractors or by any change in the composition of the firm made during or subsequent to the execution of the contract. However recognition to such Power of Attorney and change (if any) may be

given by APDCL after obtaining proper legal advice, the cost of which will be chargeable to the Successful bidder concerned.

- v) Applicant requiring any Techno-Commercial clarification of the bid documents may contact in writing or by Fax or by mail. Verbal clarifications and information given by APDCL or its employees or its Representatives shall not be in any way entertained.

13.14.PAYMENT TERMS:

All progressive payments shall be released on validity of Contract Performance Guarantee (CPG).

13.14.1 Beneficiary Contribution against Supply & Installation:

A.1: First Installment (60%): Sixty percent (60%) of beneficiary contribution per kW including 100% applicable GST against supply & Installation of the plant shall be paid on receipt and acceptance of Materials on submission of documents indicated herein under:

- i) Copy of Detailed Project Execution Plan/PERT chart and its approval by APDCL
- ii) Copy of Guaranteed Technical Particulars (GTP) and drawing approved by APDCL
- iii) Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of APDCL
- iv) Submission of the certificate by the authorized officer of APDCL that the 100% of the billable item(s) have been verified and delivered to site i.e., MICC (Material Inspection & Clearance Certificate) issued by the authorized official of APDCL
- v) Contractor's detailed invoice
- vi) Copy of field visit inspection report against each consumer issued by concerned official of APDCL
- vii) Colored photograph of the installed system

NOTE:

1. Total 4 (four) nos. of progressive bills shall be allowed.
2. The payment shall be made against supply & installation of complete systems against each project

A.2: Second Installment (40%): 40% of beneficiary contribution per kW shall be paid after Synchronization & Commissioning of the Plant subject to submission of following documentary evidence:

- i. "Synchronization & Commissioning report" generated from rodalee portal (www.rodalee.com)
- ii. Colored photograph of the installed system against each project location

NOTE: Total 4 (four) nos. of progressive bills shall be allowed.

13.14.2 CFA against Commissioning & Synchronization:

70% of CFA per kW shall be released after Synchronization & Commissioning of the Plant & uploaded the Synchronization & Commissioning report to SPIN Portal of MNRE.

Note: The said payment shall be made subject to the receipt of fund from MNRE, GOI

13.14.3 CFA against CMC

CMC Value shall be paid in 5 (five) installments, as mentioned below against submission of System Maintenance Log Book regarding satisfactory performance report of the system from the authorized signatory of the end user

Sl. No	Milestone	Percentage of CFA
1	Completion of first year of successful Maintenance by the bidder	6%
2	Completion of second year of successful Maintenance by the bidder	6%
3	Completion of third year of successful Maintenance by the bidder	6%
4	Completion of fourth year of successful Maintenance by the bidder	6%
5	Completion of fifth year of successful Maintenance by the bidder	6%

Note: All payment shall be made subject to the receipt of fund from MNRE, GOI

PART - V

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATIONS

The proposed project shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of Letter of Award & Competent Authority's decision will be final and binding on the bidder.

14.0 DEFINITION

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, as specified herein or otherwise wherever such specifications are available and applicable.

Rooftop Solar PV system shall consist of following equipments/components.

- ✓ Solar PV modules consisting of required number of crystalline PV modules
- ✓ Grid interactive Power Conditioning Unit with Remote Monitoring System
- ✓ Mounting structures
- ✓ Junction Boxes.
- ✓ Earthing and lightening protections
- ✓ IR/UV protected FRLS/FRLSOH (for underground) Cables, pipes and accessories
- ✓ Metering & associated equipments.

14.1 SOLAR PV MODULE

The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-1- requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS

- e. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
- f. The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 250 Wp and above wattage. Module capacity less than minimum 250 watts shall not be accepted.
- g. PV modules must be tested and approved by one of the IEC authorized test centers.
- h. The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- i. The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid.

14.1.1 Modules deployed must use a RF (Radio frequency) identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).

- a) Name of the manufacturer of the PV module
- b) Name of the manufacturer of Solar Cells.
- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)
- e) I-V curve for the module Wattage, I_{max}, V_{max} and FF (Fill Factor) for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

14.1.2 WARRANTIES

a) Materials Warranty

- i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than twenty five (25) years from the date of sale to the original customer ("Customer")
- ii. Defects and/or failures due to manufacturing,
- iii. Defects and/or failures due to quality of materials,
- iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option

b) Performance Warranty

The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after first ten years period of the full rated original output

15.0 ARRAY STRUCTURE

- a) Hot dip galvanized MS / **anodized aluminum of size not less than 50 mm x 50 mm x 6 mm size** shall be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum irradiation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements
- b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (like Assam-basic wind speed of 180km/hour). **It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to APDCL in compliance to standards governing, as on date like IS-875, NBC etc.** Suitable fastening arrangement such as grouting and clamping should be provided to secure the installation against the specific wind speed
- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759
- d) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.. Necessary protection towards rusting need to be provided either by coating or ionization
- e) The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. Installation of solar structure should not damage the roof in any way. If any concrete or foundation is required, it should be pre cast type
- f) **Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof**

16.0 JUNCTION BOXES (JBs)

- a) The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands
- b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent

water entry with single compression cable glands, provision of earthing. It should be placed at 5 feet height or above for ease of accessibility

- c) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / surge arrestors, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups
- d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

17.0 AC DISTRIBUTION PANEL BOARD (ACDB)

- a) AC Distribution Panel Board (ACDB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- c) The changeover switches, cabling work should be undertaken by the bidder as part of the project.
- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- g) Cable alley design needs to be compatible to allow easy access depending upon the number of AC Cables into the panel. Minimum width of cable alley shall be 300 mm. Location of bus bars should be such so as to avoid any overlapping/looping of cables in the panels.
- h) Connections of cable with the bus bars should be properly tightened & check nuts must be provided to avoid any possibility of loosening of connections.
- i) Bare/exposed portion of terminal/cables should be covered with appropriate sleeves instead of wrapping insulating tape.
- j) Should conform to Indian Electricity Act and rules (till last amendment).
- k) All the 415 Volt AC or 230 volts devices / equipment like bus support insulators, circuit breakers, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/- 10 %
Variation in supply frequency	+/- 5 Hz

18.0 PCU/ARRAY SIZE RATIO

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC (Standard test conditions)
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array

19.0 PCU/ INVERTER

- a) As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these

components of the system are termed the “Power Conditioning Unit (PCU)”. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the inverter. The PCU should also have provision of the charge controller in case of system. If necessary, inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

- Switching devices: IGBT/MOSFET
- Control Microprocessor /DSP
- Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz **(In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)**
- Output frequency: 50 Hz
- Grid Frequency Synchronization range: + 3 Hz or more
- Ambient temperature considered: -20o C to 50o C
- Humidity: 95 % Non-condensing
- Protection of Enclosure: IP-20(Minimum) for indoor: IP-65(Minimum) for outdoor.
- Grid Frequency Tolerance range: + 3 or more
- Grid Voltage tolerance: - 20% & + 15 %
- Inverter efficiency (minimum): >93% (In case of 10kWp)
- THD: < 3%
- PF: > 0.9

- b) Single /Three phase PCU/ inverter shall be used as required
- c) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- d) The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power; inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- e) Built-in meter and data logger to monitor Project performance retrievable through external computer shall be provided.
- f) The power conditioning units/inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068- 2(1,2,14,30)/Equivalent BIS Std.
- g) The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- h) The PCU/ inverters should be tested from the MNRE approved test centres/NABL/BIS/IEC accredited testing calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

20.0 INTEGRATION OF PV POWER WITH GRID

For better grid interaction and functioning of Project, the following arrangement shall be ensured by Developer:

- a) Project should have appropriate instruments installed at solar panel output, inverter and load to facilitate minute-wise recording and storage of monthly data (voltage, current, generation, consumption and grid injection) for twelve (12) Months of energy flow at various nodes.
- b) In case of network failure, or low or high voltage, Project shall go under islanding mode but not be out of synchronization so far as its operation with connected load is concerned. The supply from Project to the load points would be resumed, once the DG set comes into service, Project shall again be synchronised with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.

- c) The Project commissioned under the regulatory framework issued by AERC and as amended from time to time, shall be provided with reverse protection relays in order to prevent reverse flow of active power into the Grid. The relay and devices used for such arrangement shall be of relevant standards

21.0 DATA ACQUISITION SYSTEM / PLANT MONITORING

- a) Data Acquisition System shall be provided for each of the solar PV Project (Applicable for the Plant capacity above 1 kW)
- b) Data Logging Provision for Project control and monitoring, time and date stamped system data logs for analysis computer for data monitoring, metering and instrumentation for display of systems parameters and status indication to be provided.
- c) The following parameters should be accessible via the operating interface display in real time separately for Project:
- AC Voltage
 - AC Output current.
 - Output Power
 - Power factor
 - DC Input Voltage
 - DC Input Current
 - Time Active
 - Time disabled
 - Time Idle
 - Power produced
 - Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
 - Frequency
- d) All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a Year and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- e) String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- f) The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- g) All instantaneous data should be available through RMS.
- h) Software shall be provided for USB download and analysis of DC and AC parametric data for individual Project.
- i) Provision for Internet monitoring and download of data shall be necessarily incorporated for projects.
- j) Remote Monitoring and data acquisition through Remote Monitoring System software with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and Comprehensive O &M/control to be ensured by the supplier.

22.0 POWER CONSUMPTION

Regarding the generated power consumption, priority needs to be given for internal consumption first and thereafter any excess power can be exported to the distribution licensee network

23.0 METERING

- a) Metering panel shall be installed as near as possible, to the point of evacuation of power to grid
- b) The bidirectional electronic energy meter shall be installed by the officials of APDCL for the measurement of import/Export of energy as per their specification.
- c) An additional unidirectional electronic multifunctional meter (Solar Meter), displaying parameter details like energy, power, voltage, current and power factor etc shall be installed in solar ACDB having a spare RS485 port for APDCL use.
- d) The bidder must take approval/NOC from APDCL for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to GM (NRE), APDCL before commissioning of SPV plant.

24.0 PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standards. The protection against induced high-voltages shall be provided by the use of metal oxide arrestors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement).

EARTHING PROTECTION

Each array structure of the PV yard should be grounded/ earthed properly as per IS: 3043-1987. In addition the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of APDCL as and when required after earthing by calibrated earth tester. PCU and ACDB should also be earthed properly

Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential

GRID ISLANDING

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands."

Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided

A manual disconnect 4 pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

25.0 CABLES

Cables of appropriate size to be used in the Project shall have the following characteristics:

- Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- Temp. Range: –10oC to +80oC.
- Voltage rating 660/1000V
- Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- Flexible
- Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire Project to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified
- The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. twenty five (25) Operational Years.
- The ratings given are approximately, Power Producer to indicate size and length as per system design requirement. All the cables required for the Project provided by the Power Producer. All cable schedules/layout drawings approved prior to installation.
- Multi Strand, Annealed high conductivity copper/aluminium conductor PVC type ‘A’ pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armored cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BOS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V ,UV resistant for outdoor installation IS /IEC 69947.
- The size of each type of DC cable selected shall be based on minimum voltage drop.
- The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.
- All such external electrical works shall be required to be done as per DISCOMs SOR

26.0 CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. Following criteria have to be followed for selection of voltage level in the distribution licensee’s network for ready reference of the solar suppliers. The work should be done in compliance with respective regulations and policy.

Plant Capacity	Connecting voltage
Up to 10 kW	240 V-single phase or 415 V-three phase at the option of the consumer

27.0 TOOLS & TACKLES AND SPARES

- a)After completion of installation & commissioning of the power plant, necessary tools & tackles shall be maintained by the bidder for maintenance purpose
- b)A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, which shall be maintained. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation &Maintenance which upon its use shall be replenished

28.0 DANGER BOARDS AND SIGNAGES

Danger boards should be provided as and where necessary as per IE Act. /IE Rules as amended up to date. Three signage’s shall be provided one each at control room, solar array area and main entry in to the area. Text of the signage’s may be finalized in consultation with APDCL

29.0 FIRE EXTINGUISHERS

The firefighting system for the proposed power plant for fire protection shall be consisting of

- i) Portable fire extinguishers in the control room for fire caused by electrical short circuits

- j) Sand buckets in the control room
- k) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed

30.0 DRAWINGS & MANUALS

- a) Three sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment
- b) Approved ISI and reputed makes for equipment be used
- c) For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to APDCL before progressing with the installation work

31.0 PLANNING AND DESIGNING

Developer will engage proof consultant for checking of all Structural, Electrical and all other drawings and designs relating to this solar power project

- a) The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labor.
- b) APDCL reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements
- c) Prior to submission of drawings to APDCL, Developer will engage third party agency (proof consultant / Chartered engineer) for checking of all Structural, Electrical and all other drawings and designs relating to this solar power project
- d) The same third party agency will have to verify the installation after completion, whether it is safe and is as per the design approved
- e) The third party agency employed by the developer should have earlier experience of such works
- f) The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder shall submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work

32.0 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

The Contractor shall furnish the following drawings after Award/Intent and obtain approval

- a) General arrangement and dimensioned layout
- b) Schematic drawing showing the requirement of SPV panel, Power conditioning. Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc
- c) Structural drawing along with foundation details for the structure
- d) Itemized bill of material for complete SPV plant covering all the components and associated accessories
- e) Layout of solar Power Array
- f) Shadow analysis of the area
- g) Guaranteed Technical Particular (GTP) of Solar PV modules, inverters, Remote monitoring system, DC cables, AC cables, Junction Box

33.0 SOLAR PV SYSTEM ON THE ROOFTOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT

The Solar PV system on the rooftop of the selected buildings will be installed for meeting the maximum energy requirements depending upon the area of rooftop available, the remaining energy requirement of the buildings will be met by drawing power from grid

34.0 SAFETY MEASURES

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc

PART - VI

SAMPLE FORMS & FORMATS

Format-A

GENERAL INFORMATION ABOUT THE BIDDER

A. BIDDER INFORMATION SHEET			
Bidder's Legal Name			
Legal status of the Bidder (Please tick one)	Private Limited Company		
	Public Limited Company		
	Partnership firms		
	Limited Liability Partnership (LLP)		
	Limited Liability Company (LLC)		
	Sole Proprietorship Firm		
In case of Consortium, Legal name of each partner with participation in technical & financial	Legal Name of Consortium member	Legal status of the Bidder (Private Limited Company/ Public Limited Company/ Partnership firms/LIP/LLC/ Sole Proprietorship Firm)	Participate as a Technical / Financial Partner
	1		
	2		
Lead member of Consortium			
Bidder's legal address in India, telephone numbers, fax numbers, email address for communication			
Bidder's authorized signatory (name, designation, address, contact no.)			
Bidder's authorized representative (name, designation, address, contact no.)			

FOLLOWING NEEDS TO BE SUBMITTED BY THE BIDDER: (by each member in case of Consortium):

- Certificate of Incorporation for Public/Private limited company or Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm
- Memorandum & Article of Association in case of a Public/Private limited company.
- In case of Consortium, MoU/Agreement (duly notarized) entered into by the consortium members, containing intended participation as a Technical / Financial, nomination of Lead Member and division of responsibility to clearly define the work of each member etc.
- Authorization in favour of authorized signatory of bidder to sign the tender, and also in favour of authorized representative of each member in case of Consortium.

Note: Bidder's authorised representative shall be deemed to have authority of the Bidder to receive and deliver any correspondence and attend meetings with APDCL related to the tender

**SIGNATURE OF AUTHORIZED SIGNATORY
ON BEHALF OF BIDDER**

B. CONSORTIUM MEMBER INFORMATION	
MEMBER – 1	
Consortium Member's Legal Name (Lead Member / Financial Partner)	
Legal status of the Member	Private Limited Company / Public Limited Company / Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company/ (LLC/ Sole Proprietorship Firm (Please tick one)
Member's country of constitution	
Member's legal address, telephone numbers, fax numbers, email address)	
Member's authorized representative (name, designation, address)	
MEMBER – 2	
Consortium Member's Legal Name (Other Member/Technical Partner)	
Legal status of the Member	Private Limited Company / Public Limited Company / Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm (Please tick one)
Member's country of constitution	
Member's legal address, telephone numbers, fax numbers, email address)	
Member's authorized representative (name, designation, address)	

**SIGNATURE OF AUTHORIZED SIGNATORY
ON BEHALF OF BIDDER**

Format-B

FINANCIAL BID

(To be submitted through online only with due encryption)

RFS No _____ Date: _____

Schedule –I

Category: 1 kW

Name of Work	Quantity (No.)	Quoted Price (Rs./kWp)									
		Supply	GST (5%)	Total Supply Cost	Erection	GST (18%)	Total Erection Cost	CMC for 5 years	GST (18%)	Total CMC Cost	Total Quoted Price
1	2	3	4=3*5%	5=3+4	6	7=6*18%	8=6+7	9	10=9*18%	11=9+10	12=5+8+11
Identification of APDCL's eligible consumers, buildings /rooftops, complete design, supply, engineering, civil work, installation, testing & commissioning of 1 kWp grid connected rooftop solar PV projects including operation and maintenance (O&M) of the project for a period of 5 years after commissioning of the Projects.	1										

Note:

1. The Quoted Price is Rs./kWp
3. The quoted rate shall be for the plant capacity 1 kWp only

Date:-.....

Place:-.....

Address: -

Signature:-.....

Name:-.....

Company Seal

Format-B

FINANCIAL BID
(To be submitted through online only with due encryption)
RFS No _____ Date: _____

Schedule –II
Category: 2 kW

Name of Work	Quantity (No.)	Quoted Price (Rs./kWp)									
		Supply	GST (5%)	Total Supply Cost	Erection	GST (18%)	Total Erection Cost	CMC for 5 years	GST (18%)	Total CMC Cost	Total Quoted Price
1	2	3	4=3*5%	5=3+4	6	7=6*18%	8=6+7	9	10=9*18%	11=9+10	12=5+8+11
Identification of APDCL's eligible consumers, buildings /rooftops, complete design, supply, engineering, civil work, installation, testing & commissioning of 2 kWp grid connected rooftop solar PV projects including operation and maintenance (O&M) of the project for a period of 5 years after commissioning of the Projects.	1										

Note:

1. The Quoted Price is Rs./kWp
3. The quoted rate shall be for the plant capacity 2 kWp only

Date:-.....
Place:-.....
Address: -

Signature:-.....
Name:-.....
Company Seal

Format-B

FINANCIAL BID

(To be submitted through online only with due encryption)

RFS No _____ Date: _____

Schedule –III

Category: 3 kW

Name of Work	Quantity (No.)	Quoted Price (Rs./kWp)									
		Supply	GST (5%)	Total Supply Cost	Erection	GST (18%)	Total Erection Cost	CMC for 5 years	GST (18%)	Total CMC Cost	Total Quoted Price
1	2	3	4=3*5%	5=3+4	6	7=6*18%	8=6+7	9	10=9*18%	11=9+10	12=5+8+11
Identification of APDCL's eligible consumers, buildings /rooftops, complete design, supply, engineering, civil work, installation, testing & commissioning of 3 kWp grid connected rooftop solar PV projects including operation and maintenance (O&M) of the project for a period of 5 years after commissioning of the Projects.	1										

Note:

1. The Quoted Price is Rs./kWp
3. The quoted rate shall be for the plant capacity 3 kWp only

Date:-.....

Place:-.....

Address: -

Signature:-.....

Name:-.....

Company Seal

Format-B

FINANCIAL BID

(To be submitted through online only with due encryption)

RFS No _____ Date: _____

Schedule –IV

Category: >3 to 10 kW

Name of Work	Quantity (No.)	Quoted Price (Rs./kWp)									
		Supply	GST (5%)	Total Supply Cost	Erection	GST (18%)	Total Erection Cost	CMC for 5 years	GST (18%)	Total CMC Cost	Total Quoted Price
1	2	3	4=3*5%	5=3+4	6	7=6*18%	8=6+7	9	10=9*18%	11=9+10	12=5+8+11
Identification of APDCL's eligible consumers, buildings /rooftops, complete design, supply, engineering, civil work, installation, testing & commissioning of above 3 to 10 kWp grid connected rooftop solar PV projects including operation and maintenance (O&M) of the project for a period of 5 years after commissioning of the Projects.	1										

Note:

1. The Quoted Price is Rs./kWp
3. The quoted rate shall be for the plant capacity >3 to 10 kWp only

Date:-.....

Place:-.....

Address: -

Signature:-.....

Name:-.....

Company Seal

Format-1

COVERING LETTER

(The covering letter should be on the Letter Head of the Bidding Company)

RFS No: _____ **dated** _____

From:

_____ (Insert name and address of Bidding Company)

Tel:-.....

Fax:-.....

E-mail address:-.....

To,

The Chief General Manager (PP&D)
Assam Power Distribution Company Limited
Bijulee Bhawan, Paltanbazar
Dist.: Kamrup (Metro), Pin: 781001, Assam, India
E-mail: gmnre.apdcl@gmail.com

Kind Attention: General Manager (NRE), APDCL

Sub:- Request for Selection (RFS) for Selection of Bidders for Implementation of Roof Top Solar PV Projects aggregating to about _____ (in words) kWp under CAPEX Model at various locations in the state of Assam with RFP Specification No..... Dated

Dear Sir,

We, the undersigned _____ [*insert name of the Bidder*] having read, examined and understood in detail the Request for Selection (RFS) for Standardization of Rates for work of Survey, Design, Engineering, Supply, Installation, Testing and Commissioning Including Comprehensive Operation & Maintenance for five (5) Operational Year, **hereby submit our Bid for a capacity of _____ (in word) kWp** comprising of Financial Bid and Techno Commercial Bid. **We confirm that neither we nor any of our Parent Company / Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RFS.**

We give our unconditional acceptance to the RFS Documents attached thereto, issued by APDCL, as amended. As a token of our acceptance to the RFS Documents, the same have been initialed by us and enclosed to the Bid. We shall ensure that we execute such RFS Documents as per the provisions of the RFS and provisions of such RFS Documents shall be binding on us.

1. Bid Capacity

We have bid for the capacities of _____ (in word) kWp in residential sector as specified below in this tender document and have accordingly submitted our Price Bids for the same.

Sl. No	Particulars	Details	
1	Participated in Tender Category (General Category) / MSE Category (Please specify)	Please tick (✓)	
		Tender Category (General Category)	
		MSE Category	
2	Quoted Capacity	Quoted Capacity (kW)	
		Tender Category-I/MSE Category-I	
		Tender Category-II / MSE Category-II	
		Tender Category-III / MSE Category-III	
		Tender Category-IV/ MSE Category-IV	
		Total Quoted Capacity	

2. EMD

We have submitted a EMD of Rs.....(*Insert Amount*), for quoted capacity of _____ kWp online as per provision of RFS.

3. We have submitted our Price Bid strictly as per provision of this RFS, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format(s).

4. Tender Category:

We have bid for the capacities of _____ (*in word*) kWp in residential sectors as specified below in this tender document against the _____ **category** [*Insert Tender Category (General Category)/MSE Category/* and have accordingly submitted our Price Bids for the same as per provisions of this RFS.

Sl. No	Particulars	Details	
2	Quoted Capacity	Quoted Capacity (kW)	
		Category (1 kW)	
		Category (2 kW)	
		Category (3 kW)	
		Category (>3 to 10 kW)	
		Total Quoted Capacity	

5. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by APDCL in respect of any matter regarding or arising out of the RFS shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process. We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfill our obligations with regard to execution of projects of capacity offered by us

6. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the RFS Documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in RFS have been fully examined and considered while submitting the Bid

7. Contact Person

Details of the contact person are furnished as under

Name	
Designation	
Company	
Address	
Phone No	
Fax No	
E-mail Address	

8. We are enclosing/attaching herewith the Envelope-I & Envelope-II (Techno-Commercial documents) containing duly signed formats, each one duly sealed separately, in one original as desired by you in the RFS for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFS and subsequent communications from APDCL. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFS and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 90 days from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

Dated the _____ day of _____, 20...

Thanking you

Yours faithfully,

Name, Designation and Signature of Authorized Person in whose name Power of Attorney/Board Resolution as per Clause.....is issued.

GENERAL PARTICULARS OF THE BIDDER

Name of the Bidder	
Registered Office Address	
Telephone, Telex, Fax No	
E-mail	
Web site	
Authorized Contact Person(s) with name, designation Address and Mobile Phone No., E-mail address/ Fax No. to whom all references shall be made	
Year of Incorporation	
Have the bidder/Company ever been Debarred By any Govt. Dept. / Undertaking for undertaking any work	
Reference of any document information attached by the Bidder other than specified in the RFS.	
Whether the Bidder wishes to form a Project Company for execution of work	Yes/No
Bidding company is listed in India	Yes/No
GST No	
Certificate of Incorporation of Bidder/ Affiliate (as applicable) enclosed	Yes/No
Partnership deed or LLPF/ Sole Proprietor registration (as applicable) enclosed	Yes/No

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-.....

Date:-.....

Place:-.....

Format-3

FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the _____ [Insert name of the Bidder] (hereinafter referred to as selected Solar Power Developer) submitting the response to RFS inter alia for selection of the Project for “ **Implementation of 2 MW Grid Connected Rooftop Solar PV System for Residential Sector in different district throughout the State of Assam**” of the capacity of _____ kWp [insert the quoted capacity], in response to the RFS dated..... issued by Assam Power Distribution Company Limited (hereinafter referred to as APDCL) and APDCL considering such response to the RFS of.....[insert the name of the selected Solar Power Developer] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Solar Power Project of the Solar Power Developer and issuing Letter of allocation & allocate -----kWp to (Insert Name of selected Solar Power Developer) as per terms of RFS and the same having been accepted by the selected SPD or a Project Company, M/s ----- {a Special Purpose Vehicle (SPV) formed for this purpose}, if applicable]. As per the terms of the RFS, the _____ [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally pay to APDCL without demur at Guwahati forthwith on demand in writing from APDCL or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees _____[Total Value] only, on behalf of M/s _____ [Insert name of the selected Solar Power Developer / Project Company]

This guarantee shall be valid and binding on this Bank up to and including..... and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement

Our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only). i) Nos ----- dated ----, Value -----; ii) Nos-----dated -----, Value -----).

Our Guarantee shall remain in force until..... APDCL shall be entitled to invoke this Guarantee till

The Guarantor Bank hereby agrees and acknowledges that APDCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by APDCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to APDCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by _____ [Insert name of the selected Solar Power Developer / Project Company as applicable] and/or any other person. The Guarantor Bank shall not require APDCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against APDCL in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Guwahati shall have exclusive jurisdiction

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly APDCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Solar Power Developer / Project Company , to make any claim against or any demand on the selected Solar Power Developer / Project Company or to give any notice to the selected Solar Power Developer / Project Company or to enforce any security held by APDCL or to exercise, levy or enforce any distress, diligence or other process against the selected Solar Power Developer / Project Company

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until We are

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if APDCL serves upon us a written claim or demand

Signature

Name:-

Power of Attorney No.:-

For

[Insert Name of the Bank]

Banker's Stamp and Full Address

Dated this ____ day of ____, 2020

Witness:

1.

Signature

Name and Address

2.

Signature

Name and Address

Notes:

1. The Stamp Paper should be in the name of the Executing Bank and of appropriate value. The Performance Bank Guarantee (PBG) shall be executed by any of the Scheduled Bank

CHECK LIST FOR BANK DIRECTORY

Sl. No	Details of checks	Yes/No
a.	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
b.	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on back of stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be purchased either in the name of executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG).	
c.	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
d.	Is each page of BG duly signed / initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
e.	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
f.	Are the factual details such as Bid Document No. / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
g.	Whether overwriting/cutting if any on the BG have been properly Authenticated under signature & seal of executants?	

Format-5

POWER OF ATTORNEY

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

(a) Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We (Name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. (Name & residential address) who is presently employed with us and holding the position of as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for **"Implementation of 2 MW Grid Connected Rooftop Solar PV System for Residential Sector in different district throughout the State of Assam"** in response to the RFS No dated issued by Assam Power Distribution Company Limited (APDCL), Guwahati including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which APDCL may require us to submit. The aforesaid Attorney is further authorized for making representations to APDCL, Guwahati and providing information / responses to APDCL, Guwahati representing us in all matters before APDCL and generally dealing with APDCL, Guwahati in all matters in connection without Bid till the completion of the bidding process as per the terms of the above mentioned RfS.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RfS.

Signed by the within named

..... (Insert the name of the executant company)

through the hand of

Mr.

duly authorized by the Board to issue such Power of Attorney

Dated this day of

Accepted

.....

Signature of Attorney

(Name, designation and address of the Attorney)

Attested

.....

(Signature of the executants)

(Name, designation and address of the executants)

.....

Signature and stamp of Notary of the place of execution

Common seal of has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1.

(Signature)

Name.....

Designation

2.

(Signature)

Name.....

Designation

Format -6

FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT

(To be submitted on the letterhead of Bidding Company & Certify by Chartered Accountant)

Ref: RFS No _____ Date: _____

To,

The Chief General Manager (PP&D)
Assam Power Distribution Company Limited
Bijulee Bhawan, Paltanbazar
Dist.: Kamrup (Metro), Pin: 781001, Assam, India
E-mail: gmnre.apdcl@gmail.com

Kind Attention: General Manager (NRE), APDCL

Sub:- Request for Selection (RFS) for Selection of Bidders for Implementation of Roof Top Solar PV Projects aggregating to about _____ (in words) kWp capacity under CAPEX Model at various locations in the state of Assam with RFP Specification No..... Dated

Dear Sir,

We submit our Bid/Bids for the total capacity of _____ kWp; for Bids for which we submit details of our Financial Eligibility Criteria Requirements.

We certify that the Financially Evaluated Entity (ies) had an Net worth as specified in this RFS

Financial Year	Year of Incorporation	Net Worth (Rs.)

(Attach Separately **Format-9** with this format)

Yours Faithfully

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-.....

Date:-.....

Place:-.....

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company

Name:

Date:

Place:

Format-7

ANNEXURE-1
Work Experience
(To be submitted individually against each work / contract)

Bidder's legal name **Date.....**

Work Experience		
Particular	Details	
Employer's Name (Letter of Award / Contract issuing authority)		
Employer's Address: Telephone / Fax number: E Mail		
Contract / LOA Number & Date		
Schedule Date of Completion		
Type of Work (Grid Connected Rooftop Solar Power Plant/ Grid Connected Solar Power Plant)		
Capacity of Allotted Work	_____ kWp	
Role in Contract (Individual/JV/Consortium)		
If Role in Contract is JV/Consortium, specify Technical Partner & Financial Partner	Name of Technical Partner	Name of Financial Partner
Actual works executed by the Applicant (Individual bidder or Technical partner of Consortium)	Grid Connected Rooftop Solar Power Plant	Grid Connected Solar Power Plant other than Rooftop
	_____ kWp (Duly substantiated with Client Certificate)	_____ kWp (Duly substantiated with Client Certificate)
% of work executed by the Applicant within the Schedule Date of Completion	_____ % (Duly substantiated with Client Certificate)	

NOTE:

- Only the value of contract as executed by the applicant/member in his own name should be indicated. Where a work is undertaken by a group, JV/JVA only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.
- Separate sheet for each work along with Clients Certificate and performance certificate six months in operation after the completion of work, to be submitted

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-.....

Date:-.....

Place:-.....

Format -8

DOCUMENTS REQUIRED FOR PROJECT SANCTION

Following documents will be required for project sanction:

1. List of interested residential consumers of APDCL along with site survey report against each location as per attached format prescribed in this RFS to GM (NRE), APDCL for approval (**Annexure –I**).
2. Consent Letter from the Consumer willing to install RTS Power Plant within his premises and ready to deposit requisite amount (beneficiary contribution) as notified by APDCL (**Annexure – II**)
3. Apply to www.rodalee.com on behalf of consumer & submit the copy of online submitted application form generated from www.rodalee.com
4. Copy of Technical Feasibility report against each consumer generated from www.rodalee.com
5. Copy of EPC agreement executed between consumer & empanelled vendor for installation & commissioning and CMC of the Plant
6. Copy of EXIM Meter payment receipt as issued by field official of APDCL regarding submitted requisite meter cost to the CEO of concerned electrical circle APDCL
7. Specifications of the Components and Bill of Material/ Quantities

Sl. No	Component	Specifications	Quantity	Make
1	Solar PV module			
2	Aggregate Solar PV capacity (kWp)			
3	Grid Tie inverter (Type and Capacity)			
4	Aggregate Inverter capacity (kVA)			
5	Module mounting structure			
6	Array Junction Box			
7	AC Distribution Board			
8	Cable (All type)			
9	Earthing Kit (maintenance free)			
10	Solar Meters			
11	Online monitoring system	Specify		

NB: Final approval for the installation of the RTS plant to the consumer premises shall be issued by GM (NRE), APDCL after getting requisite beneficiary contribution from the consumer.

ANNEXURE- 2

Financial DATA

Applicant's legal name **Date:- --/--/2020**

Each Applicant or member of a Consortium must fill in this form

S.N.	Description	Financial Data for Last Year (Indian Rupees) (audited data)
		2019-20
1	Total Assets	
2	Current Assets	
3	Total External Liabilities	
4	Current Liabilities (inclusive of provisions, if any)	
5	Annual Profits Before Taxes	
6	Annual Profits After Taxes	
7	Net Worth [= 1 - 3]	
8	Working Capital [=2 - 4]	
9	Return on Equity	
10	Annual turnover	

Attach copies of the audited balance sheets, including all related notes, income statements for the last audited financial years, as indicated above, complying with the following conditions

8. Separate Performa shall be used for each member in case of Consortium.
9. All such documents reflect the financial data of the Applicant or member in case of Consortium, and not sister or Parent Company.
10. Historic financial statements shall be audited by Statutory Auditor of the Company under their seal & stamp and shall be strictly based on Audited Annual Financial results of the relevant period(s). No statements for partial periods will be accepted.
11. Historic financial statements must be complete, including all notes to the financial statements.
12. Return on Equity = Net Income / Shareholders Equity
13. Return on Equity = Net Income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock).
Shareholders equity does not include preferred shares.

8. The above Annexure shall be duly certified by Chartered Accountant under his signature & stamp.

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company

Name:

Date:

Place:

Format-10

CONSORTIUM AGREEMENT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

THIS Consortium Agreement ("Agreement") executed on this _____ day of _____ 2020 between M/s [insert name of Lead Member] _____ a Firm / Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Lead Member", which expression shall include its successors, executors and permitted assigns)

And

M/s _____ a Firm / Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Technical Member", which expression shall include its successors, executors and permitted assigns), which expression shall include its successors, executors and permitted assigns)

WHEREAS, each Member individually shall be referred to as the "Member" and both the Members shall be collectively referred to as the "Members" in this Agreement.

WHEREAS, the Assam Power Distribution Company Limited (hereinafter called APDCL or Employer), Company incorporated under the Company's Act, 2013 has invited response to RfS No. ____ dated ____ for **design, manufacture, supply, erection; testing and commissioning including warranty, operation & maintenance of 2MW Roof Top Solar PV power system in Residential Sector throughout the State of Assam under CAPEX Model."**

WHEREAS the RFS documents stipulates that the Lead Member may enter into a Technical Consortium Agreement with another Company / Corporate entity to fulfill the Technical Eligibility Criteria as stipulated in the RFS document. The Members of the Bidding Consortium will have to submit a legally enforceable Consortium Agreement in a format enclosed with the RFS document

NOW THEREFORE, THIS AGREEMENT WITNESSTH AS UNDER:

In consideration of the above premises and agreements all the Members in this Consortium do hereby mutually agree as follows

1. We, the Members of the Consortium and Members to the Agreement do hereby unequivocally agree that (M/s _____), shall act as the Lead Member as defined in the RFS for self and agent for and on behalf of Technical Member.
2. The Lead Member is hereby authorized by the Technical Member of the Consortium to bind the Consortium and receive instructions for and on their behalf.
3. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective obligations. Each Member further undertakes to be individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement
4. Subject to the terms of this Agreement, the Technical member shall be responsible for providing technical knowledge for "Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance" to the lead member.
5. In case of any breach of any commitment by any of the Consortium Members, the Lead Member shall be liable for the consequences thereof.
6. This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at Guwahati alone shall have the exclusive jurisdiction in all matters relating thereto and arising there under.
7. It is hereby further agreed that in case of being shortlisted, the Members do hereby agree that they shall abide by the terms & conditions of the RFS document.
8. It is further expressly agreed that this Agreement shall be irrevocable and shall form an integral part of the RFS submitted to APDCL and shall remain valid till completion of the job assigned to the Contractor.

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

9. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to RFS.
10. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under this agreement without the explicit permission of APDCL.
11. This Agreement
- (a) Has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;
 - (b) Sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and
 - (c) May not be amended or modified except in writing signed by each of the Members and with prior written consent of APDCL.

IN WITNESS WHEREOF, the Members have, through their authorized representatives, executed these present on the Day, Month and Year first mentioned above.

For M/s-----[Lead Member] -----
(signature, Name & Designation of the person authorized vide Board Resolution)
Dated

Witnesses:
1) Signature-----
Name:
Address:

2) Signature -----
Name:
Address:

For M/s----- [Technical Member]

(signature, Name & Designation of the person authorized vide Board Resolution
Dated [●])
Witnesses

Format-11

UNDERTAKING FOR CORRUPT & FRAUDULANT PRACTICE
(To be submitted on the letterhead of Bidding Company)

It is confirmed and declared that we, or any of our associate, have not been engaged in any fraudulent and corrupt practice and that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract and no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not any such amount.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

NOTE:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder or constituent member in case of Consortium.

FORMAT- 12

(Undertaking)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that APDCL/ any Central / State government department / public sector undertaking / other government entity or local body has not banned business with us as on the date of tender submission. Also none of the work has been rescinded / terminated by APDCL / any Central or State Govt. Department / Public Sector Undertaking / Other Govt. entity or local body after award of contract to us during last 3 years (from the last day of the previous month of tender submission) due to our non-performance.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the JV/Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 13

(UNDERTAKING FOR NOT BEING PENALISED IN A CONTRACT)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that we have not paid liquidated damages of 10% (or more) of the contract value in a contract due to delay or penalty of 10% (or more) of the contract value due to any other reason during last five years

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 14

(UNDERTAKING FOR FINANCIAL STABILITY)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that we have not suffered bankruptcy/insolvency during the last 5 years.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 15

UNDERTAKING FOR DOWNLOADED TENDER DOCUMENT

We here by confirm that, we have downloaded / read the complete set of tender documents /addendum/clarifications along with the set of enclosures hosted on <https://www.assamtenders.gov.in>. We confirm that we have gone through the bid documents, addendums and clarifications for this work placed upto the date of opening of bids on / <https://www.assamtenders.gov.in>. We confirm our unconditional acceptance for the same and have considered for these in the submission of our financial bid.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

TECHNICAL DETAILS OF THE PROPOSED COMPONENTS

((To be submitted on the letterhead of Bidding Company))

Sl. No	Item	Make Proposed by Bidder	Technical Compliance as per RfS	Test report submitted by the Bidder (Yes/No)
1	Solar PV Module		IEC 61215 / IS 14286	Yes/No
			IEC 61730 Part -1	Yes/No
			IEC 61730 Part -2	Yes/No
2	Mounting Structure		Hot dip galvanized MS (IS 2062:1992 & IS 4759)	Yes /No
3	Junction Box		IP 65 and IEC 62208	Yes/No
4	ACDB		IEC 60947, Part I, II and III/ IS 60947 Part I, II and III	Yes/No
			IP 65 and IP 54	Yes/No
6	PCU /Inverter		IEC 61683 / IS 61683 and IEC 60068 -2 (1,2,14,30)	Yes/No
7	Cable		IEC 60227/ IS 694, IEC 60502 / IS 554 Std	Yes/No

The proposed components as approved by TEC during tender evaluation will be part of GTP.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

Annexure – I

**Site Survey Report
(To be furnished on the letter head of Empanelled Vendor)**

RFS No:
LOA No: Date

Sl. No	Name of Consumer	APDCL's Consumer No	Connected Load (kW)	Existing Connection (3Ph / 1 Ph)	Latitude	Longitude	Available Shadow Free Areas (Sq. m)	Plant Capacity (kW) based on available Shadow Free Areas (1 kW = 10 sq. m shadow free areas)	Plant Capacity (kW) based on 80% of Connected Load (kW)	Eligible Plant Capacity (kW)	Proposed Plant Capacity under 2 MW RTS Program of APDCL (kW)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	10 = (4)*80%	11 = Lowest value between 9*10	

**Seal & Signature of the Empanelled Vendor
Date**

Annexure – II

Format for the undertaking by the Consumer

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

Ref No _____

Date: _____

To,

The Chief General Manager (PP&D)
Assam Power Distribution Company Limited (APDCL)
6th Floor, Bijulee Bhawan, Paltanbazar
Guwahati – 1

Sub: Request for installation of Grid Connected Rooftop Solar Power Plant in EXIM metering within my premises under the CAPEX Model through APDCL

Sir,

I (Name of Consumer), C/o having Consumer No. of Electrical Sub Division / IRCA of District Pin wish to install KW Grid connected Rooftop Solar Power Plant in CAPEX model at (Specify name of project site) under Grid Connected Rooftop Solar PV Program (Phase – II), MNRE, GOI to be implemented by Assam Power Distribution Company Limited.

I hereby undertake that:

1. The Solar Power Plant shall be installed as per guidelines of Ministry of New & Renewable Energy, GOI and through the empanelled vendor of APDCL for availing Central Financial Assistance (CFA) under this program

2. **[Drafted as applicable]**

I have selected M/s from the list of Vendors Empanelled by APDCL, notified on www.rodalee.com as per my choice for site survey, installation & commissioning of Rooftop Solar Power Plant within my premises.

OR

The Vendor as assigned by GM (NRE), APDCL will carryout for site survey, installation & commissioning of Rooftop Solar Power Plant within my premises.

3. The Engineering, Procurement & Construction (EPC) Agreement will be executed with the empanelled vendor of APDCL after getting Technical Feasibility Report from APDCL

4. The requisite beneficiary / consumer's contribution & EXIM meter cost as notified on www.rodalee.com shall be deposited to APDCL as per instruction issued by APDCL

5. The installed system will be in my possession and will not be transferred to anyone. If shifting of system is required due to shifting of my residence/ occupancy, prior sanction from APDCL will be obtained

6. Personnel from MNRE / APDCL will be allowed to inspect the system installed at any time, if required by them

Signature
Name:
Mobile No:
Address in full

FORMAT- 17

CONTRACT AGREEMENT FORMAT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

This contract (hereinafter, together with all attachment annexed hereto and forming its integral part thereof, call the Contract) is made on the _____ day of the month of _____ '2020, between, **Assam Power Distribution Company Limited**, having its head quarter at Bijulee Bhawan, Paltan Bazar, Guwahati-781001 and represented by the Chief General Manager (PP&D), having his office at Bijulee Bhawan, Paltan Bazar, Guwahati-781001 (hereinafter referred to as APDCL which expression shall unless repugnant to the context of meaning thereof includes its successors and assigns) of the one part and

_____, a Company registered under the Laws of _____ and having its registered office at _____, (hereinafter called the contractor which expression shall unless repugnant to the context of meaning thereof includes its successors and assigns) of the other part.

WHEREAS

- (A) APDCL has placed work order for **Site Survey, Design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance of _____ kW Grid Connected Rooftop Solar Power Plant in Residential sector at different locations in the State of Assam** and provides other services as covered in this contract vide work order _____ dtd. _____.
- (B) The contractor has accepted the work order as set forth above vide reference No. _____ Dtd. _____.
- (C) The APDCL and the contractor shall jointly be termed as "Parties"
- (D) The contractor, having represented to APDCL that they have the required professional skill, personnel and technical resource have agreed to provide the services on the terms and conditions set forth in this contract.

NOW THEREFORE THE PARTIES HERETO HEREBY AGREE AND COVENANT AS FOLLOWS:

- 1. The parties hereto hereby covenant, bind and undertake to observe and perform this contract faithfully for the work of **"Site Survey, Design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance of Grid Connected Rooftop Solar Power Plant in Residential sector at different locations in the State of Assam"** and execute, perform and do all works and things mentioned and described in the contract and in all other documents annexed hereto and in accordance with such conditions, specifications and terms and conditions forming part of this contract to the entire satisfaction of APDCL and shall respect, perform, observe and fulfill all such terms, conditions and specifications which are expressed or intended to be performed, observed or fulfilled by the contractor.
- 2. The following documents, which are deemed to be integral part of this contract as in herein, set out verbatim and / or is hitherto annexed, shall be binding on the parties.
 - a. Annexure – A: Copy of Letter of Intent, if any
 - b. Annexure – B: Copy of work order
 - c. Annexure – C: Copy of Contractor's Acceptance Letter
 - D. Annexure –D: Security Deposit
 - E. Negotiation record, if any
- 3. **Security Deposit:** The contractor has deposited a security amount to the tune of _____ by _____
The security deposit will be released after successful and satisfactory completion of installation and commissioning of the full ordered systems & completion of the CMC period.
- 4. The parties hereto hereby agree and declare that in consideration of the payments to be made by APDCL, the contractor shall execute the work as defined in the contract in the manner and as prescribed in this contract or which are implied or may be necessary for the completion of the said work or incidental thereto on the terms and conditions mentioned in the contract.

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

In witness whereof the parties hereto have signed this agreement hereunder on the date respectively mentioned against signature of each.

FOR AND ON BEHALF OF
SUPPLIER / MANUFACTURER
/CONTRACTOR

FOR AND ON BEHALF OF

ASSAM POWER DISTRIBUTION COMPANY LIMITED

PLACE:

DATE:

WITNESS:

1.

2.

PART - VII

**ENGINEERING, PROCUREMENT &
CONSTRUCTION (EPC) AGREEMENT
BETWEEN EMPANELLED VENDOR OF APDCL
AND
RESIDENTIAL CONSUMER OF APDCL
FOR
SURVEY, DESIGN, MANUFACTURE, SUPPLY,
ERECTION, TESTING AND COMMISSIONING
INCLUDING WARRANTY, OPERATION &
MAINTENANCE OF GRID CONNECTED
ROOF-TOP SOLAR PHOTOVOLTAIC IN
CAPEX MODEL**

ENGINEERING, PROCUREMENT & CONSTRUCTION AGREEMENT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

This Engineering, Procurement & Construction Agreement (hereinafter referred to as the "**Agreement**") is entered into on this _____ (date), at _____ (Location) **BY** and **BETWEEN** a company incorporated under the Companies Act, 1956/2013 or Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm and having its registered office _____ (hereinafter referred to as the "**CONTRACTOR**") which expression shall where the context so admits be deemed to include its executors, administrators, representatives and permitted assigns) of the ONE PART;

AND

_____ legal owner of the premises (address of the customer who he/she intend to get installed the Grid Connected Rooftop solar (GCRS) PV system, (hereinafter referred to as the "**CUSTOMER/BENEFICIARY**") which expression shall where the context so admits be deemed to include its heirs, executors, administrators, representatives and permitted assigns) of the OTHER PART;

The expressions "**CONTRACTOR**" and "**CUSTOMER/BENEFICIARY**", wherever the context so permits or requires shall collectively be referred to as "**Parties**" and individually as the "**Party**".

WHEREAS:

- A. CONTRACTOR is a fully integrated solar solutions provider that offers comprehensive solar solutions to the consumers.
- B. CUSTOMER/BENEFICIARY is a of Residential Consumer of APDCL (**L_DOM_A, L_DOM_B, H_DOM_N**)
- C. CONTRACTOR has been notified as successful bidder by Assam Power Distribution Company Limited (APDCL) vide its Letter of Allocation No. _____ dated _____ for site survey, design, manufacture, supply, erection, testing and commissioning including warranty, operation and maintenance for a period of 5 years of roof-top Solar PV System and has been awarded _____kW capacity in 2020 for Residential sector.
- D. CONTRACTOR and CUSTOMER/BENEFICIARY enter into this Agreement for engineering, procurement & construction of a roof-top Solar PV Power System.

NOW, this Agreement witnessed as follows:

1. PURPOSE & SCOPE OF THE AGREEMENT

- 1.1 The purpose of this Agreement includes site survey, design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance for a period of 5 years of a _____KW proof-top Solar PV Power System (hereinafter referred to as the "**Solar Power System**") for the CUSTOMER/BENEFICIARY, (hereinafter cumulatively referred to as the "**Works**"), for which the CUSTOMER/BENEFICIARY has handed over the premises, which is with a clear title and is encumbrance free, to the CONTRACTOR, along with required approvals from concerned authorities, and the CUSTOMER/BENEFICIARY's entering into this Agreement is proof enough of its consent to start work thereon.
- 1.2 The technical specifications (hereinafter referred to as the "**Technical Specifications**") that need to be adhered to by the CONTRACTOR in implementing the roof-top Solar PV Plant for the CUSTOMER/BENEFICIARY shall be in accordance with the ones issued by APDCL vide RfS No. _____ dated _____ and the performance parameters (hereinafter referred to as the "**Performance Parameters**") that shall govern the Scope of Duty of the CONTRACTOR regarding the Works for the CUSTOMER/BENEFICIARY are mentioned in detail in **Schedule 1** to this Agreement.
- 1.3 All the pedestals meant for mounting the modules must be casted on the lintel by removing the tiles and other loose material in the area where the pedestals are to be casted. The surface of the lintel should be thoroughly cleaned and an adhesive should be applied on the lintel surface before casting the pedestals in order to have strong bonding with the lintel. After casting of the pedestals the water proofing material should be applied surrounding the pedestals in order to avoid any water seepage during rainfall.

- 1.4 Contractor shall ensure that SPV modules, parts of MS structures, other hardware like nuts, bolts and grouting hardware etc., are not loosely scattered over the terrace of a building. These items must be securely stored in an enclosed room where they cannot be affected by winds or such loose materials must be tied properly. Further, Successful bidder shall ensure that rooftop Solar PV system should be designed and installed in such a way that its performance should not be affected due to the problem of water logging at site etc.
- 1.5 The design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the relevant MNRE's scheme. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.
- 1.6 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

2. EFFECTIVE DATE

The Agreement will enter into effect from the date of its execution (the "**Effective Date**") for all contractual obligations under this Agreement.

3. NON DISCLOSURE & CONFIDENTIALITY

Any information (whether oral, written, visual or otherwise, hard or soft copy as may be provided by either Parties, provided the same is reduced in writing immediately and marked and identified as confidential information) disclosed or made known by the Parties to each other, shall be considered "**Confidential Information**" unless otherwise specified. Both the Parties commit to a strict maintenance of confidentiality, of any information shared by either of the Parties. Any confidential information shared as a result of this Agreement shall remain in force until that particular Confidential Information falls into the public domain through no act or omission on part of the Parties or for a period of two (2) years from the last disclosure, whichever is later

4. COMPLETION PERIOD

The completion period of the project shall be **08 months** from the date of issuance of LOA by APDCL.

5. WARRANTIES

- 5.1 The CONTRACTOR hereby warrants to the CUSTOMER/BENEFICIARY that the Scope of Work as executed by the CONTRACTOR shall be of good workmanship for a period of 5 years from Acceptance. During the period of 5 years from the date of completion of work ("**Warranty Period**") the CONTRACTOR shall rectify any part of the Works done found defective due to faulty materials and workmanship, for reasons solely attributable to the CONTRACTOR.
- 5.2 The CONTRACTOR will obtain manufacturers' warranties on the PV modules, inverters, as well as other components of the Power System for which manufacturer's warranties are available, in the name of the CUSTOMER/BENEFICIARY. Up until Acceptance, the CONTRACTOR will exercise any rights under the manufacturers' warranties on behalf of the CUSTOMER/BENEFICIARY

6. FORCE MAJEURE

- 6.1 Force majeure shall mean any cause, existing or future, which is beyond the reasonable control of any of the parties including acts of God, storm, fire, floods, explosion, epidemics, quarantine, earthquake, strike, riot, lock out, embargo, interference by civil or military authorities, acts, regulations or orders of any governmental authority in their sovereign capacity, acts of war (declared or undeclared) including any acts of terrorism.

- 6.2 None of the parties shall be liable for the failure to perform any obligation in terms of this Agreement if and to such extent such failure is caused by a Force Majeure, provided that none of such acts of Force Majeure will relieve the CUSTOMER/BENEFICIARY from meeting its payment obligations.
- 6.3 The party prevented to fulfill its obligations (hereinafter referred to as "**the Affected Party**") by Force Majeure shall notify the other party through written means including fax/email/ post within one week after occurrence and cessation of such Force Majeure and it shall be established by the Affected Party that the Force Majeure had delayed performance of the Affected Party's obligations and services and was beyond the reasonable control of the Affected Party and not due to the default or negligence of the Affected Party.
- 6.4 The periods for performance of this Agreement as agreed upon shall be extended by the periods of delay caused by such Force Majeure, as long as the period of Force Majeure does not last longer than three months.
- 6.5 If a Force Majeure continues for more than three months and the parties are not able to reach an agreement on the continuation of the Agreement within a further term of one month, the fulfillment of the Agreement shall automatically be deemed impossible and shall stand suspended / terminated.

7. INSURANCE

- 7.1 CUSTOMER/BENEFICIARY shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Agreement, the appropriate insurances set forth the sums equivalent to the contract price.
- 7.2 CONTRACTOR shall at its expense take out and maintain in effect or cause to be taken out and maintained in effect, during the construction period, the appropriate insurances for transportation of goods and materials

8. SITE ACCESS

- 8.1 The CUSTOMER/BENEFICIARY shall ensure the accuracy of all information and/or data to be supplied by the CUSTOMER/BENEFICIARY and shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, for preparation and maintenance of proper access roads to, and provide the right of way for, the Site, and for providing possession of and access to all other areas reasonably required for the proper execution of the Agreement, including all requisite rights of way, on or before the Effective Date.
- 8.2 The CUSTOMER/BENEFICIARY is under an obligation to provide access to Site at all times to the CONTRACTOR and to APDCL officials, for the entire life of the Power System.
- 8.3 The progress of Works will be monitored by APDCL and the Power System will be inspected for quality at any time during commissioning or after the completion of the Power System either by officer(s) from APDCL or a team comprising of officers from APDCL.

9. CUSTOMER/BENEFICIARY OBLIGATIONS

- 9.1 The CUSTOMER/BENEFICIARY must not interrupt the Works, and/or shall abstain from any act or omission of which it can reasonably be expected that it may delay the Works or make the Works more difficult and or expensive for CONTRACTOR. In addition to this, the CUSTOMER/BENEFICIARY alone shall be responsible, at his cost and expenses, for:
- a) Necessary statutory declaration forms, certificates, way bills, etc. on timely basis as may be required by the CONTRACTOR for movement of the goods to the Site and for claiming the tax or duty benefits on the imported, inter-state and local supplies and the services provided under this Agreement in line with policies in vogue.
- b) The CUSTOMER/BENEFICIARY & CONTRACTOR shall obtain in a timely and expeditious manner No Objection certificate from the DISCOM

10. SITE ADDRESS

The Site address where Works need to be performed to construct the Power System is:_____

11. PROVISION OF DATA

The CONTRACTOR shall be under an obligation to provide all data pertaining to Works and Power System for 5 years to APDCL, *inter alia*, about PV array energy production, solar irradiance, wind speed, temperature, etc. The customer/beneficiary as such will allow the CONTRACTOR to install a data logging system for power system monitoring.

11.1 The parameters of Works, and/or Power System shall be measured by using solar monitoring system to maintain and to study the performance of Power System.

11.2 For access to real-time data, the CUSTOMER/BENEFICIARY agrees to provide APDCL with the right to install any additional online monitoring equipment(s) on the Power System.

12. INDEMNITY

Both Parties shall fully Indemnify and hold harmless both parties and its affiliates, associates, directors and employees from and against, any and all losses, costs, damages, injuries, liabilities, claims and causes of action, including without limitation arising out of or resulting from claims by third Parties, acts, omissions or breach of any of the both parties affiliates, suppliers, employees, agents or contractors in the performance of both parties obligations under this Agreement or otherwise arising out of the Power System or its usage

13. NOTICES

Any notice through facsimile/e-mail/post and other communication provided for in this Agreement shall be in writing and sent to the address mentioned on the first page of the agreement

14. DISPUTE RESOLUTION

If any dispute of any kind whatsoever arises between Customer and Contractor in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent. .

If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given. Any dispute in respect of which a notice of intention to commence arbitration has been given in accordance with Sub Clause 14.1, shall be finally settled by arbitration.

14.1 In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below:

The Customer and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the later of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator.

If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.

If for any reason an arbitrator is unable to perform its function for a period of 45 days or more, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in Clause 15 (Governing Law) and a substitute shall be appointed in the same manner as the original arbitrator.

Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be Guwahati.

The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.

The arbitrator(s) shall give reasoned award. Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.

Cost of arbitration shall be equally shared between the Contractor and Customer.

15. **GOVERNING LAW**

All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of India, and the courts at Guwahati, India shall have exclusive jurisdiction with respect to any Dispute that occurs according to, or in relation to, the Agreement.

16. **SEVERABILITY**

If any provision of this Agreement is deemed or held by a court of competent jurisdiction, to be contrary to law or otherwise unenforceable, the provisions of this Agreement shall be enforced to the extent legally permissible and unenforceability of any of the provisions of this Agreement shall not affect the remaining provisions of this Agreement, which shall remain in full force and effect.

17. **LIMITATION OF LIABILITY**

- 17.1 Subject to Clause 12 of this Agreement, but notwithstanding anything contained anywhere else in this Agreement, in no event shall a Party be liable, whether in contract, tort or otherwise, to the other Party for special, indirect or consequential loss or damages (such as, not exclusively, loss of production, loss of reputation, loss of income, loss of profit), except in case of fraud, wilful default or reckless misconduct by the defaulting Party.
- 17.2 The maximum aggregate liability of the CONTRACTOR to the CUSTOMER/BENEFICIARY, arising out of or in connection with this Agreement or any breach, non-performance or performance of any provisions hereof, after Acceptance, and till up to the period of operation and maintenance, cannot amount to more than 5% (five per cent) of the Price for the Power System.

18. **BINDING AGREEMENT**

- 18.1 This Agreement, along with its Schedules, in and of itself is an enforceable binding contract and constitutes the entire agreement between the Parties with respect to the subject matter hereof to the exclusion of all other understandings and assurances, either written or oral. The clauses contained in this Agreement shall not be construed as creating a partnership or joint venture, agency or employment relationship among the Parties. The relationship between the Parties under this Agreement is as principal to principal basis.

IN WITNESS WHEREOF the authorized signatories of the Parties hereto have signed this Agreement on the day, month and year first above written:

FOR AND ON BEHALF OF < Name of Contractor > M/s _____	FOR AND ON BEHALF OF <Name of Customer/ beneficiary,>
---	--

RFS FOR IMPLEMENTATION OF 2 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM IN RESIDENTIAL SECTOR IN DIFFERENT DISTRICTS THROUGHOUT THE STATE OF ASSAM THROUGH CAPEX MODEL UNDER Grid Connected RTS Program (RTS Ph-II), MNRE

_____	_____
AUTHORISED SIGNATORY	AUTHORISED SIGNATORY
NAME: DESIGNATION:	NAME: DESIGNATION:
_____	_____
WITNESSNAME:	WITNESSNAME:

SCHEDULE 1
PERFORMANCE PARAMETERS

Project-

Site Location- (Latitude & Longitude)

Total Rooftop Area (m2)

Total Usable Rooftop Area for solar installation (m2)

Type of Roof & Tilt

Radiation data reference:

Energy Simulation:

Power evacuation:

Energy in Thousand kWp

End Of year	Global Horizontal (kWh/m2/year)	Global Inclined (kWh/m2/year)	Net Energy at Metering point ((kWh/kWp/year))	PR (%) at the metering point	Capacity Utilization Factor (%)
1					
2					
3					
4					
5					

The Process for allotment of consumer to the empanelled vendors shall be as follows

